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Policy Options for Slum Improvement

Some Comments on 1988-89 Union Budget

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EDITORIAL - SOME HIGHLIGHTS

I. General Economic Scene

State

State Budget 1988-89

The Tamil Nadu budget for 1988-89 was presented to Parliament on March 17 and after a general discussion of the budget a vote on account for the first six months of the year was obtained. The budget begins as usual with the Revised estimates for 1987-88 with the revised revenue receipts being Rs. 2944.97 crores compared to Rs. 2779.25 crores in the original budget, revised revenue expenditures at Rs. 3249.51 crores compared to the original Rs. 2874 crores, increasing the revenue deficit from Rs. 94.85 crores to Rs. 304.54 crores. Revised capital receipts are Rs. 881.62 crores against the original Rs. 657.98 crores and capital expenditure Rs. 893.77 crores against the budgeted Rs. 780.95 crores, reducing the capital deficit from Rs. 122.97 crores to Rs. 12.15 crores. Public account revised is Rs. 100.17 crores compared to the budgeted Rs. 37.24

crores, so that the revised overall deficit is Rs. 216.52 crores against the budgeted Rs. 180.58 crores, the revised operating balance being + Rs. 12.90 crores against the budgeted — Rs. 26.11 crores and the revised closing balance being Rs. 203.62 crores against the budgeted Rs. 206.69 crores. For 1988-89 the revenue receipts are Rs. 3187.72 crores, the revenue expenditures Rs. 3405.28 crores, giving a deficit on revenue account of Rs. 217.56 crores, capital receipts Rs. 710.46 crores and capital expenditures Rs. 700 crores giving a capital account surplus of Rs. 10.46 crores. Public Account are budgeted at Rs. 83.36 crores, resulting in overall deficit of Rs. 123.74 crores, with the opening balance being — Rs. 203.62 crores and closing balance at — Rs. 327.36 crores. The highlights of the budget are: i) as the budget is very largely a holding operation no additional tasks have been proposed. 2) The Annual Plan for 1988-89 is established at Rs. 1457 crores which is a 16.5 per cent increase over that for 1987-88, with priority provisions for power Rs. 500

crores, agriculture and allied services Rs. 136 crores, water supply, housing and urban development Rs. 247 crores, Social welfare and nutrition Rs. 118 crores, Rs. 84 crores for transport and communication and Rs. 69 crores for industry and minerals. 3) The total allocation for agriculture is increased from Rs. 141 crores to Rs. 151 crores. 4) For water supply from Rs. 148 crores to Rs. 160 crores including Rs. 56 crores for Madras Water Supply and Rs. 30 crores for Krishna water supply. 5) For social welfare from Rs. 92 crores to Rs. 97 crores which include old age pension for 18000 destitute women and widows employment for 25000 women (Rs. 50 crores), centres for training young village women in the basis of health, hygiene, nutrition and local crafts and special schemes for the handicapped (Rs. 2 crores). 6) For Education from Rs. 597 crores to Rs. 690 crores. 7) For medical and public health from Rs. 228 crores to 258 crores which includes opening 110 new primary health centres. 8) For industry from Rs. 54 crores to Rs. 65 crores along with an assurance concerning the rehabilitation and strengthening of small scale and medium industries, the integrated assistance to sick small units, the creation of a climate for promoting new investments, acceleration of the pace of industrialisation and expansion of employment opportunities, the reactivation of the handloom weavers, housing schemes involving putting up 2000 new houses for women and rationalisation of sales taxes on local capital goods, ancillary and electronic industries. 9) Rs. 177 crores for the Chief Minister's Nutritious meal programme, Rs. 10 crores for free supply of footwear for school going children and poor rural working mothers, Rs. 15.5 crores for free supply of uniforms to students, Rs. 7.6 crores for supply of

textbooks free of cost to students and a new scheme the 'Jawaharlal Nehru Science Talent Book scheme' for providing 3000 science degree college students in 1988-89 science text books. 10) Rs. 150 crores for the special component Plan for the Welfare of scheduled castes and Rs. 27 crores for link roads, water supply, a new scheme the 'Kamaraj New Harijan Housing scheme' which will provide fire proof housing to the scheduled castes. There are also proposals to provide funds to Tamil writers and authors and pensions for temple Odvors. It is difficult to comment on the budget which has been drawn up a) to continue past welfare schemes, b) to finance the new welfare projects and c) to provide no new development schemes. On the fiscal side, the absence of any effort to mobilise additional resources in light of the overall deficit of Rs. 123.74 crores and the negative closing balance of Rs. 327.36 crores is to be regretted. Second as usual, the revenue deficit is large (over double the original 1987-88 revenue deficit) and e) is being financed in part by capital surplus. The government's assurance that the deficit will be reduced through reduction in non development expenditure is not reflected in the budget. The deficit and closing balance of — Rs. 227.36 crores is a serious inflationary and anti development factor. Third, the Union budget tradition of starting up new welfare scheme in grandiose names — Kamaraj, Jawaharlal Nehru — is reflected in this state budget, with no assurance that they will be implemented without a break. In this connection no mention is made of the scheme of 30 lakh houses for the poor announced by the government in January 1986. Fourth, there is no development programme prospect to support the growing welfare programme.

in particular industry and minerals has the lowest allocation, which means that there are no industrial revival in the state. The promise to help sick industries and to rationalise sales taxes needs to be translated into action.

Tamil Nadu Economy

Studies on the state's economy show that the key to the states industrial development lies in providing the maximum boost to the agricultural sector. This is underlined in the disturbing fact that though the share of the primary sector in the state's GDP has declined from 51.9 per cent in 1961 to 39.9 per cent in 1971 and to 27.4 per cent in 1981, the workforce in the primary sector which was 64.5 per cent in 1961 is still 63.5 per cent in 1981. The employment effects of the secondary sector show a marginal increase from 15.2 per cent in 1971 to 17.1 per cent in 1981. In the case of the tertiary sector whose share in GDP had increased from 30.4 per cent in 1961 to 34 in 1971 and 38.8 per cent in 1985, its impact on the employment market fell from 20.3 per cent in 1971 to 19.4 per cent in 1981. This accounts for the economic backwardness of the rural population who continue to depend on the shrinking agricultural sector, resulting in the high rates of poverty in the state compared to other states. That may also account for Gujarat and Maharashtra doing better than Tamil Nadu in their higher growth rate, though compared to Tamil Nadu their infrastructural growth is low. Tamil Nadu's infrastructural index has declined from 171 in 1966-67 to 144 in 1981-82, while in Maharashtra it was a decline from low 117 to 115 and Gujarat a small increase from 111 to 126. Tamil Nadu's growth rate

improved to 2.94 per cent in 1981 from 2.10 per cent in 1961, while Maharashtra improved from 2.90 per cent to 4.97 per cent and Gujarat from 2.60 per cent to 4.15 per cent. During the period the primary sector recorded negative growth rate in Tamil Nadu of —12.8 per cent, against +5.5 per cent in the secondary and +3.9 per cent in the tertiary sector—from which it is deduced that the decline in the primary sector is the root for the low growth rate of the state. A 3 year district credit Plan for 1988-89 for Rs. 3294.70 crores based on the March 1987 RBI directives has been finalised by the banks in Tamil Nadu and is to start from 1988-89. It covers 19 districts, with Rs. 1733.76 crores (53 per cent) for agriculture, Rs. 753.37 crores (23 per cent) of SSI and Rs. 80757 crores for services. For 1988 a target action plan for Rs. 1404.95 crores, which ensure credit flow to NABARD schemes like waste land development, dry land farming, special oil seeds development and alternative energy sources development programmes. The major district credit plan goes to districts of Chingleput (Rs. 291.70 crores), North Arcot (Rs. 244.4 crores), South Arcot (Rs. 250 crores), Salem (293.09 crores), Periyar (Rs. 256.29 crores), Coimbatore (Rs. 319.96 crores), Madurai (Rs. 208.04 crores) Tiruchi (Rs. 307.81 crores) and Thanjavur (216.16 crores). The Annual Plan provides for substantial hikes to the districts of Salem (Rs. 137.26 crores), Coimbatore (Rs. 129.41 crores), Periyar (Rs. 121.68 crores), South Arcot (Rs. 116 crores), North Arcot (Rs. 115.63 crores) and Tiruchi (Rs. 114.16 crores). A review of 1987 Plan shows that against the target of Rs. 1202 crores Rs. 1017 crores were disbursed upto September being 85 per cent achievement against the target of 75 per cent, with targets

surpassed in all districts except Coimbatore, Anna and Kanyakumari districts. In all districts except Anna and Kamarajar, agriculture did well, but in industry the effort needs to be toned up in 10 districts. In services, the target has been overshoot in all but 5 districts. While RR Banks have surpassed their targets, 9 public sector and most private sector banks are trailing their targets. Among special schemes, banks have cleared a loan of Rs. 11.14 crores under SEEUY 105830 persons and to 42,909 persons under SEPUP in 143 centers in 20 districts. In addition the banks are assisting 1000 persons for self employment under the state governments' one job per family scheme.

State loan

The State government announced the issue of 11 per cent Tamil Nadu loan for Rs. 45.50 crores in March, with the usual possibility of retaining 10 per cent excess offers, that is Rs. 4.50 crores.

Climate and Prices

The weather in March was dry and warm in most part of the state, with occasional rains in the South. On prices, CSO's monthly abstract of statistics for December 1987 reports the index number of consumer prices for industrial workers is a high 745 in July, being a sharp rise of 18 points (2.5 per cent increase) due to the rise in the food price index by 24 points in July over June, is a stagnant 2 point rise in August and 4 point in September, due to food prices not rising. The index number of consumer prices for agricultural labourers records an 8 point rise to 598 in July (1.5 per cent), 5 points rise in August and a sharp 25 point increase in

September to 628 being a 4 per cent rise due mainly to the high 5 per cent rise in food prices. The index number of consumer prices for urban non manual employees shows a high rise of 17 points (2 per cent) for Madras followed by a similar 17 points for Tiruchi (2 per cent) and 10 points for Madurai for July, a smaller 5 point rise for Madras, 11 point rise for Madurai and 11 points for Tiruchi in August and 8 point rise for Madras, 11 point rise for Madurai and 10 points rise for Tiruchi in September — which represent a steady rise in inflation.

Power

The power situation in the state in March was a continuation of that of February, with normal supply along with the 40 per cent cut on HT industries (1000 out of 2000 HT consumers). The Electricity Board states that the power cut will not be increased during the coming summer months, despite the fact that the 27 per cent short fall in hydel generation is compensated only partially, upto 15 per cent, from the thermal source plus the 8 per cent increase in purchase of power from the Union sector. With the free supply of power to small farmers, the energisation of pumpsets now numbering 11.2 lakh (with over 1 lakh being small farmers) should be noted, along with pending application for energisation of 4 lakhs. There is a growing shortfall in power due to demand increasing faster than supply, so that power shortage in the state will continue into the 21st century. The Board also announced that a 5MW set for using the gas from Bhuvanagiri is being planned. In the annual Plan for 1988-89 power generation gets an additional Rs. 88 crores to Rs. 505.20 crores, with generation given Rs. 338.05 crores and transmission

and distribution Rs. 150 crores. The major part of the allocation is for Mattur thermal stage 2 (two units of 210 MW each) followed by Tuticorin Stage III (2x210MW) and North Madras (3x210 MW). Kalpakkam reports that the 30 kilowatt atomic reactor fuelled by uranium 233 is to be commissioned soon and is the forerunner of future reactors to be run on man made fuel derived from the beach sands of Kerala and Tamil Nadu. A good development is the commission of the third set of second Thermal plant at Neyveli at end of March, well before the target date. Power at the country level in March continued with some states like Kerala, Karnataka and AP, as well as the northern region facing severe shortages and experiencing power cuts. The AP power situation is so serious that Hindustan zinc, Coromandal Fertilisers and other major industrial units in Vishakapatnam have been seriously affected. 80 per cent cut has been imposed on HT consumers. Some units like the SAIL steel unit and Vishakapatnam Port Trust are using the power they need and paying the penalty charges for the excess use. Karnataka government has asked all HT users to close operation from 6-9 p.m. every day. On the other hand the Union ministry keeps reporting that power generation in the country increased by 10.6 per cent in February and the PLF was a high 61.4 per cent. The second 500 MW Korba Thermal unit was commissioned in March. Parliament was informed that the Power Finance Corporation is disbursing Rs. 100 crores for ongoing power projects. It was also informed that in 1986-1987 and in 1987-88 hydel generation is short of the target (by 9 million units in 1987-88) and that 74 per cent of rural areas has electricity, which will become 100 per cent by the end of the VIII Plan. What this means however is that power lines run through the village, each of which might have one

point. REC has requested World Bank assistance of \$320 million for system improvement and the setting up of mini and micro hydel projects, on which earlier a request for \$112 million had been made to the World Bank. A World Bank team is examining the detailed proposals and plans on this matter with REC officials. The 1988-89 budget is disappointing on financing alternative energy sources, the department of Non Conventional Energy sources budget being increased by Rs. 5 crores to Rs. 105 crores, which given the inflation rate of over 10 per cent is a real decrease. The department is engaged in important practical programmes to expand energy in the rural areas — the plan for 5000 MW through wind energy which has suffered a reduction in allocation from Rs. 6.9 crores in 1987-88 to Rs. 5.38 crores in 1988-89 and which will be kept going through generous Danish aid, biogas for which a small increase from Rs. 48.16 to Rs. 53.43 crores is made, which is inadequate to fund the 2-3 lakh plants and the installed chulas of 5-6 lakhs and the silicon solar cell technology. The starving of this essential renewable energy programme for the rural areas is short sighted and is to be regretted. The government announced on March end that it has under study 9 gas based power plants with cumulative capacity of 3000MW — The proposals are from Assam, MP, Gujarat, Haryana and AP to the Central Electricity Authority. This is a good and important development.

Water

The State government states that 125 pockets in the state have been identified as problem drinking water areas and that 31 exist in 5 districts — Madras, Anna, Ramanathapuram, Kamarajar, and

Pasumpon Muthuramalingam, where, bore well are being sunk. The government states that it has finalised two major schemes of tube wells and open wells at a cost of Rs. 112 crores in the drought prone Pudukottai and Kamarajar districts which will tap ground water for irrigation. 20 desalination plants are to be established in the state by December, each at a cost of Rs. 7 lakhs, with capacity each to treat 100 litres of sea water a day. This work will use indigenous technology — the Madras based Titanium Equipments and Annode Manufacturing Company (TEAM) — the cost of treating one litre of water would be 1 to 1.5 paise and the plants will be located in rural areas. The Telugu Ganga project problems between AP, Karnataka and Maharashtra seem to be near solution. In modification of the earlier design to convey the water by pipeline, AP prefers to take the water to Madras via open canal via Rayaleseema which will also meet its irrigation needs. This involves the use of 29 tmc of additional water which Karnataka and Maharashtra must not object to. Metro water is to try out chemical spraying at Red Hills and Sholavaram lakes to reduce evaporation loss during the summer months, when over 50 per cent of the water stored in these lakes is lost through evaporation. Water to Madras city continues on alternate day but the quantity has been increased from 50 million gallons to 55 million gallons a day. Metro water also announces that it will make available 35 million gallons of secondary quality water a day by September to water based industries in Madras through recycling sewage water at the Kodungaiyur sewage plant. The main users will be MFL, MRL & SPIC. With EEC assistance, the government is

undertaking the renovation of 5600 exzamin tanks in 4 drought prone districts of Kamarajar, Ramanathapuram, Pasumpon Muthuramalingam and Pudukottai at a cost of Rs. 78.5 crores. This is estimated to result in the production of an additional 1.24 lakh tonnes of rice. In the next phase, work in 150 tanks in 12 districts will be taken up to benefit 25000 hectares and produce 35,900 tonnes of additional rice.

Transportation

The doubling of lines between Tambaram and Chingleput is reported progressing according to schedule, the second track between Tambaram and Guduvancheri being commissioned this year. This will make possible extension of the Electric train services to Guduvancheri. Following the hike in petrol prices, the auto and taxi fares in the state have been raised as from 1 April 1988.

National

Plan

The major event in March was the release and presentation to Parliament at long last of the Mid term appraisal of the Seventh Plan and its consideration by the National Development Council. It points out that the overall growth rate of the economy in the first 2 years at 4.8 per cent and 4 per cent and the estimate for the third year at a maximum of 2 per cent casts doubt on the sustainability of targeted 5 per cent for the VII Plan, which the table below brings out, which is attributed to the drought.

Sector	7th Plan target	1985-86	1986-87 (quick estimate)
1. Agriculture	2.5	0.3	-2.6
2. Mining	11.7	7.0	11.3
3. Manufacturing	5.5	8.3	9.0
4. Electricity	7.9	8.2	10.0
5. Construction	4.8	3.9	2.6
6. Transport	7.1	9.0	8.4
7. Other sectors	6.1	6.5	6.5
All sectors	5.0	4.8	4.0

Source : CSO

But it notes with satisfaction that manufacturing averages 8.9 per cent against the target of 5.5 per cent and that infrastructure has done very well which it attributes to the Plan strategy and policies. The second major problem pointed out is the pressure on resources for the public sector plan. While the pace of plan expenditure was satisfactory, the manner in which it had been financed differed substantially from what was anticipated. "The main areas of concern relate to the shortfall in the surpluses of public enterprises, the steep growth in non plan expenditures and the extent of deficit financing", adding that deficit financing "may be a major factor generating inflationary potential in the economy". This is opposed to the Finance Minister's statement to Parliament (when replying to the general debate on the budget) that the "budget deficit of Rs. 7484 crores was in the manageable limits, being 2 per cent of GDP" which had been accepted

as a world standard". Third, there is serious concern over the balance of payment position as a result of the poor export performance in the first 2 years. It calls for "an active policy of intervention to maintain the external deficit within manageable limits". The fourth issue (which is really the first) is to correct the shortfalls in the creation of the agricultural potential. Thus the mid term Appraisal emphasises the increased dependence on borrowing and deficit financing to finance the VII Plan so far, leading to the prospect of a big heavy debt burden in real terms. In 4 years the Union Plan outlay will be Rs. 99,579 crores, which is 86 per cent of the envisaged outlay at 1984-85 prices. The larger outlays — which also apply to State Plans — indicate the keenness to keep the VII Plan in shape. As against the target of Rs. 22,306.09 crores to be mobilised by 25 states in VII Plan, in the first 3 years Rs. 7,393.37 crores have been mobilised. In the case of the

states, dependence on Union assistance increased from 36.8 per cent to 38.5 per cent because of natural calamities. At the Union level the biggest gap between projections and performance is the short-fall in the balance from current revenues which has turned negative during the VII Plan. The review also recommends doing away with reservations and incentives for the small scale sector, as they inhibit the growth of the more successful and efficient small firms in graduating to the medium and large sector. The mid term appraisal points to the need for harnessing primary energy reserves with their exploitation and exploration, recommends 15-20 years for energy planning instead of the current 5 years to allow for the long gestation and large capital investments involved. It says future policies of the small scale sector should help link small scale industrialisation with organised industry, which makes our ancillirisation and sub contracting as a means of fostering the growth of the small sector important. While Khadi and Village industries will attain their targets, village industries face serious problems of modernisation. The review of the mid term assessment by the National Development Council did not add to the issues, its follow up has raised two issues. The first is that a number of operational issues are now under active consideration — such as district planning, associating voluntary agencies in the delivery system, enunciation of technological policies for agriculture, rural industries etc. A task force has been set up to draft a district planning model, which, given the work done on this in the past, seem futile. Second, there is the question of the power and scope of the Planning Commission on which two suggestions are under consideration : a) the proposals and papers of the commission should go directly to the cabinet, which is a step forward : b) the Planning

Commission should be made responsible for investment planning in the private sector. This needs to be pondered over and worked on.

Prices

Price inflation during February was nil, the whole sale price index standing at 413.5 for the week ending February 27. For the financial year during the first 11 months April 1 to March 5 the rate of inflation was 9.7 per cent on the basis of the whole sale price index according to the government's report to Parliament on March 28. The government states that the effect of the rises in the administered prices of coal, edible oils, sugar, iron and steel would be only 0.55 per cent, which also avoided increasing the subsidies, which would be a charge on the budget. During the month of February the index for food articles declined following the fall in prices of eggs, fruits and vegetables, jowar, barley, ragi and tea, while those of fish, condiments, spices and maize and coffee became dear. Prices of edible oils, raw silk, raw cotton decreased, while that for raw jute, cement and textiles increased. The consumer price index for industrial workers for the first ten months April—January 1987-88 was 9.8 per cent higher than the index for that period in 1986-87. Towards the end of March, government raised the issue prices of wheat for the public distribution system from Rs. 195 per quintal to Rs. 204 per quintal on the grounds that this would compensate for the rise in the support prices from Rs. 166 to Rs. 173 per quintal. RBI reports an absolute increase in the currency component of Rs. 20,141 crores during the period of the last Friday in March 1987 to February 12, 1988, compared to the increase of Rs. 19,776 crores during the parallel period in 1986-87,

though the rate of increase was lower at 14.3 per cent compared to the previous 16.7 per cent. It should also be noted that to contain the 1987-88 budget deficit (revised) with 6.9 per cent of the budget estimate, market borrowings were increased to Rs. 7000.09 crores against the budgeted Rs. 6300.09 crores, which is sending up the burden of the interest rate.

Supplementary demand and Union loans

The third and final batch of supplementary demands for 1987-88 for Rs. 3669 crores were approved by the Parliament in early March. Against this, matching savings of Rs. 2272 crores were identified by the departments, so that the net additional expenditure is Rs. 1397 crores. The demands are Rs. 445.94 crores transfer to states, for public sector Rs. 818.45 crores and other items like modernisation of the Press, 4th pay commission Rs. 2109.74 crores. The government announced on March 22, 3 loans for Rs. 1055 crores which resulted in a net receipt of Rs. 7000.08 crores. The government announced that the external debt as at March 31 was Rs. 36,355 crores and internal debt Rs. 170,834 crores. Interest payments in 1987-88 are estimated at Rs. 1034 crores on external debts and Rs. 10416 crores on internal debts. The worrisome part of this debt situation is that it is also replicated in regard to the finances of the states. Like the Union budget, the budget of states also (with very few exception) levy no taxes and rely on borrowing — through small savings promotion which returns to the states. But this also increases their debt burden. For instance, the repayment of loans and interest from the states to the Union has increased between 1986-87 to

1988-89 by 30 per cent and the Union budget in 1988-89 receiving on these 2 items, Rs. 6875 crores from the states.

Stock Exchange

In March the Ministry of Finance announced the lifting of the (four & half month) ban on carry forward transactions and the introduction of the second phase of the Dave committee's recommendations. That is from March 11, regulated carry over deals (a maximum of Rs. 25 lakhs of shares will be allowed). The effect has been a depressed market during the last fortnight of March. The Bombay exchange decided in March to keep in abeyance the delivery of new shares against old. There are problems that the investor faces for which the stock exchange seem to have no answer. There is the problem of the investor having to bear the aberrations of members of the exchanges as well as those of the listed companies; the absence of any effective deterrent to insider trading as the sanction of dealings on their securities hurts the share holders; there is the problem of defaults which court decrees cannot remedy as the defaulter disposes all his assets before he is declared one; there is the problem of rapid speculation which destroys the confidence of the investor. What is needed is the development of a culture among members of the exchanges that keeps their transactions within the rules and keeps buying and selling within limits.

Economy

To safeguard the environment and counter pollution a cell comprising representatives from industry, local

residents, environment experts, scientists, economists and members of the Central Pollution Board has been proposed. In addition to developing plans to control pollution and monitoring its implementation, it would set up technical groups to identify appropriate techniques for different areas and work out basic guidelines for each area. The problem of pollution from sugar mills, paper units, leather tanneries is serious as is the treatment of industrial waste — all of which should be the subject of legislation. In light of the inflation, it is proposed that the ceiling of Rs. 6000 for composition loans under RBI should be increased to Rs. 10,000, involving an increase in advance by the banks which is now Rs. 575 crores or a reduction in the number of clients. The government reports that over 68 lakh families have been assisted to cross the poverty line under IRDP during 1985-87. During 1987-88 against the target of 39.11 lakh families to be assisted, 29.82 lakh families have been assisted through loan cum subsidy of Rs. 477.68 crores upto January 31, 1988, compared to Rs. 441.1 crores given to 30.61 lakh families in 1985-86 and Rs. 613.37 crores to 37.47 lakh families in 1986-87 to bring them above the poverty line. The government reports that the concurrent evaluation shows that about 61 per cent of the old families have crossed the poverty line of Rs. 3500. The Planning Commission on the other hand states that it is unrealistic to expect alleviation of poverty solely on the basis of a self employment programme like IRDP and proposes a 4 point strategy to sharpen the effectiveness of anti poverty and employment programmes for the remaining years of VII Plan and particularly for the VIII Plan, as follows: a) making the programmes more purposive and selective; b) linking them more

closely with the economies of rural areas including rural towns; c) introducing policy initiatives in other areas like industry and services to provide stringent and lasting support to employment and income generation efforts for the poor; and d) parallel with creating regular wage employment opportunities, giving greater emphasis to casual wage employment on public works and production activities allied to agriculture.

Industry

The industrial growth rate for 1987 is by the quick index of CSO reported at 11 per cent, despite the deceleration from 10.2 per cent in 1987 November to 6.1 per cent in December. Manufacturing which accounts for over three fourth of the weight of the index shows a growth rate of 12.7 per cent, electricity 8.3 per cent (weight 11.4 per cent) and mining 4.3 per cent (weight 11.4 per cent). There has been a deceleration of the high industrial growth during 1987 from 14.8 per cent in January—March to 11.5 per cent in April—June, 10.9 per cent in July—September and 7 per cent in October—December. For the first 9 months of 1987-88 April—December industrial growth was 9.7 per cent, with mining at 4.6 per cent, manufacturing 11 per cent and electricity 7.6 per cent. The Economic Times survey of the performance of the private corporate in March 1987 shows a continuing of the 1985-86 set back of the top 101 companies in 1986-87 in falling growth rates in assets, sales and profits, reflected in the declining cash flow and profitability ratios. In terms of assets, Reliance is at the top followed by Tatas, which is at the top in sales and profits. The lowest firms have grown with assets above Rs. 100 crores.

RBI's study of 581 large public limited companies show that in contrast to the successive good performances in 1984-85 and 1985-86, the performance of the companies in 1986-87 was subdued, with the ratio of gross savings to gross capital formation declining from 54.1 per cent in 1985-86 to 52.6 per cent in 1986-87, the external funds used to finance asset formation increasing from 63.8 per cent to 67.3 per cent, both operating profits and post tax profits declining. The Ministry of Programme Implementation reports that cost over runs for 169 delayed projects as at December 31, 1987 was Rs. 21,000 crores. The Ministry of Industry reports that bank credit blocked in sick units increased from Rs. 4270.93 crores in 1985 to Rs. 4874.49 crores in 1986 with West Bengal leading with 28,777 sick small units (increase of 54.6 per cent over 1985), followed by Tamil Nadu with 17024 small sick units, UP 15815, AP 13004. In 1986 Maharashtra had the largest number of large sale sick units (161) followed by West Bengal (146). The government reports that Rs. 348.72 crores have been spent on modernising 109 nationalised and 16 managed textile units under NTC. A committee has suggested that indigenous design in micro electricity should be protected from international competition through fiscal measures. The government also reports that over 23,000 workers have been reemployed as a result of the management takeover of 13 textile mills in Bombay in 1983, with 10,800 voluntarily retiring and 8500 not being absorbed. SCI reports that 7 of the 17 sick shipping companies which it is investigating are beyond salvage and "would have to lose their identity through merger or liquidation". The shares of the Indian Petrochemicals

Ltd are now being offered to the public, from the private placement with SBI.

Public Sector units performance

In 1986-87 the public sector enterprises report net profits at Rs. 1769 crores (an increase of 51 per cent over 1985-86), the major part being from the petroleum sector at Rs. 2142 crores. All other enterprises show a loss of Rs. 373 crores. For 1987-88 the Bureau has published results for the first 6 months for 179 out of 214 enterprises, which show an increase in gross sales by 17.3 per cent, a lower rate of increase of inventories at 7.7 per cent compared to 11.2 per cent in 1986-87. The overall profitability ratio declined by 7.4 per cent and the overall rate of return has declined from 9.82 per cent in the first half of 1986-87 to 8.2 per cent in the first half of 1987-88. Gross profitability in the public sector units are not comparable with similar figures for the private sector, since public enterprises obtain loans from the Union government at lower than market rates. Also recently they have raised funds through bond flotations which being tax free impose on them a lower interest burden. Therefore an assessment based on net profits in relation to net worth is more appropriate. Profitability so defined is less than 5 per cent in the last 2 years. The Seventh Plan visualised that internal resources of public enterprises will finance 52 per cent of the Union Plan but in the first 3 years, the proportion has been 33 per cent. This is despite the report that in March 11 public sector enterprises have signed memorandum of understanding with their administrative ministries as recommended by the Arjun Sen Gupta Committee to give the enterprises more freedom in setting

production goals, turnover and profits as well as loans of Rs. 219.10 crores being written off by March 1988 for 6 units.

National Production Front

Steel

The 5 steel plants under SAIL achieved their MOU February target of 6.31 lakh tonnes, with production between April 1987 to February 1988 being 5.926 million tonnes of saleable steel. For all integrated plants the total was 7.83 lakh tonnes for February (104 per cent of target). SAIL also reports that the 5 plants marketed 5.19 million tonnes of saleable steel between April–February which was a 12 per cent growth over the corresponding 11 months in 1986-87. The budget surcharge of 5 per cent on excise means that the base price of steel items will increase by Rs. 20 to Rs. 50 per tonne. SAIL also reports that it is intensifying its R&D in refractories to reduce the present level of consumption of 55 kg per tonne of crude steel to 25 kg per tonne by 2000, to make steel production more efficient.

Crude

In March reports on exploration included the first exploratory well being spudded by OIL in Jaisalmer, Rajasthan, the oil and gas struck in the first week at Nannilam in Thanjavur district by ONGC and the start of the commercial supply of gas from the oil wells at Narimanam to the steel rolling mill in Nagapattinam. (The Cauvery strike is the fourth after Narimanam, Kovilkalamal and Bhuvanagari). The Union government announced in March that

the responsibility of processing, transporting and marketing natural gas in the country is transferred from ONGC and OIL to Gas Authority of India Ltd (GAIL). It also informed Parliament that crude import in 1987-88 is 18.34 million tonnes and 15,600 tonnes of petrol. India produced 66 per cent of its crude consumption. 1988-89 will record the pay off of the high investments in the exploration and exploitation of oil and gas by ONGC and OIL during the first 3 years of the VII Plan. The stagnant trend in oil production will end with an increase of 2 million tonnes to 32.18 million tonnes, the HPJ gas grid will become operational, using the Bassein gas for meeting the needs of the fertiliser plants which will increase gas output by 1.64 million cubic metres to 8.07 billion cubic metres, and the plans for erecting gas turbines to use the free and associated gas in Tripura, Krishna Godavari and Cauvery basin. The allocation for ONGC and OIL in 1988-89 is Rs. 2575 crores, the budget support being only Rs. 105 crores, the remainder being internally generated. ONGC raised four foreign loans to meet its foreign exchange liabilities and will repay them from its earnings. In addition the increased gas consumption will reduce the pressure on kerosene and higher output of fertilisers will reduce a dependence on imports.

Non Ferrous

Zinc production in February was 5030 tonnes, with HZL accounting for the major part, 4029 tonnes. There was a shortfall in production at Debari due to restricted power availability, with the Vizag smelter suffering a 60 per cent cut. The cumulative production from

April 1987 to February 1988 was 750,010 kg against 723,588 kg in that period in 1986-87. BALCO which has been incurring losses since its inception reports turning the corner and making a modest profit in 1987-88. This is due to its high capacity use which is 97 per cent and 100 per cent of the target over the past 5 months.

Cement, Sugar, edible oils

In cement, the budget announcement to reduce the levy obligation was put into effect from March 1988. Pre 1982 units which are sick have levy reduced from 30 per cent to 15 per cent of production, for others from 50 per cent to 30 per cent. Units started after 1 January 1982, levy reduced from 30 to 20 per cent. But with the shortage of power that the cement industry faces, its production in 1987-88 will be 39 million tonnes against the target of 42.5 million tonnes. This will not be immediately felt as there are large stocks of unsold cement. So that what is needed is a revival in demand which the increased building programme promoted by the budget may bring about. The cement industry faces problems in 1988-89. There is the power cut, from which a good South West monsoon could provide relief. There is a marginal reduction of excise duty of Rs 20 per tonne which is more than offset by 5 per cent surcharge on excise. Finally the industry has been pleading for an increase in levy prices which has not been conceded. The Visvesvaraya committee has recommended that the government reschedule its loan to the Cement Corporation of India and to convert the loan into equity so that the present debt equity ratio of 1.17:1 could become 1:1. This together with reducing its production costs and expenditure on

marketing along with a programme of diversification will make the plant look up and produce internally resources. On sugar the government announces that it has agreed to set up 19 new sugar factories and is permitting 57 existing factories to expand the capacity to produce 1.527 million tonnes of sugar a year. 25 of the factories to be expanded are in the cooperative sector. The government has urged the old and sick units to use the soft loan scheme and the sugar development fund to modernise and rehabilitate sugar factories. A disturbing development is that dues of mills to sugar cane growers has jumped from Rs. 60 crores in February to Rs. 400-500 crores by April, which will lead to decreased production next year. On edible oils, a blue print for building a buffer stock of edible oil — its size, the means of using it to attain price stability and the agency to operate it, all these are being finalised, according to the government.

Cotton and Fertilisers

The long term cotton policy announced in May 1987 has been a non starter, with a check on the export of cotton after the first 5.07 lakh bales were released in 1977. The reasons given for this non implementation of the policy was the shortfall in cotton production as a result of the drought and the increased consumption by the mill sector. This led to pressure in prices, shortage in supply and the government decision (see vol. VIII P. 137) to import cotton against export of cotton yarn. This in turn raised the price of cotton yarn and brought hardship to handloom weavers, as a result of which the government decided in March to allow export of only 40 million kg of cotton yarn in 1 to 60s count group. SIMA on the other

hand, reports that due to slackening of domestic demand and the fall in international prices, making exports unattractive, SIMA mills alone hold 54 mills kg of yarn as at March 9, 1988. On fertilisers, there has been some confusion on the means of giving effect to the 7.5 per cent discount announced in the budget. The government announced that the proposed discount will be absorbed in the existing subsidy. This relieves the industry over the worry about the impact of the discount on its profitability. If the price had been reduced, it would get reflected in the subsidy, resulting in a loss of Rs. 350 crores to the industry. That is why the government announced that within the existing fertiliser subsidy structure, by marginal variations in the cost of inputs, the cost of production is reduced so that the discount is absorbed by the existing subsidy. The Varadarajan committee on nitrogenous fertiliser plants refers to complete dependence on imports as far as phosphatic fertilisers are concerned, and on nitrogenous fertilisers despite their abundant supply by domestic plants recommends that out of the deficit of 54 lakh tonnes in 1994-95, 35 lakh tonnes could be met by imports and only for the rest increase in capacity is recommended. This recommendation is based on easy availability of nitrogenous fertilisers internationally and available at low prices — both of which are questioned for the future. The committee recommendations are a wrong pointer to other industries.

Agricultural production

The major event in March was the approval of the action plan by 14 states to attain foodgrain production of 175 million tonnes by 1989-90. The plan

is based on a 6 pronged strategy that is a) suitably adjusted to different agro climatic regions b) fertiliser use is to be increased by 20 kg per hectare and for this more retail outlets are to be opened selling 10-20 kg packs. c) to increase use of improved HYV seeds a seed plan for 1988-89 and 1989-90 is proposed. d) Better management of weeds and timely control of pests and diseases are to be undertaken. e) Ground water through tube wells is to be harnessed and completion of on farm development works in command areas and irrigation projects in execution are to be ensured. f) Bonus or incentives for production and procurement of foodgrains and increased flow of short term/long term credit are the other aims of the plan. District credit plans should be drawn up so that the requirements of short term credit are fully met. NABARD is working with State governments to this end. Thus the 14 states and the identified 169 potential districts in them will aim at attaining the targeted increase in rice, wheat, maize, gram and arhar. The action plan together with the budgetary incentives summarised in the last issue — reduction of short term agricultural loans interest rates, increased flow of agricultural credit by Rs. 3000 crores, reduction in fertiliser prices, Jaldhara scheme etc. should reverse the declining production trend of the past 3 years and lead to the production of 166 million tonnes of foodgrains this year, 1988-89. ICAR reports that it has geared itself to support the programme. Further the production of rape seed, mustard and soya bean is expected to be an all time record this year. The expected short fall of 15 million tonnes of the country's foodgrains production in 1987-88 over the 144 million tonnes in 1986-87 is officially estimated to be reduced by half following widespread winter rains in

Punjab, Haryana and UP, if they do not persist or prove to be too heavy, as the Haryana hailstorm which destroyed several crores of rupees worth of rabi crops. This is important because the per capita availability of foodgrains has declined by 2.3 per cent in 1987 (at 465.6 gms per day compared to 476.1 gms in 1986), by 13.6 per cent in pulses availability (from 41.9 gms in 1986). Despite the green revolution and the 3 fold increase in foodgrain production since the 50s, per capita availability of grains is yet to reach the level of 480.1 gms per day attained in 1965, for pulses the net per capita availability in 1956 was 70.3 gms per day has been declining to 61.6 gms in 1965, 39.7 gms in 1975 and 30.9 gms in 1980 and 38.7 gms in the trienium 1985-87. The Central Research Institute for Dry Land Agriculture (CRIDA) created in April 1985 is now applying on integrated technology to dryland (which is 70 per cent of our crop land) through the 47 model water sheds and meeting the needs of the foodgrain, fodder, fuel, wood, timber, fruits, vegetables and fibres. On the other farm policies, the Hanumantha Rao task force recommendation have been accepted by a committee of secretaries comprising: a) land use planning with emphasis on localised agricultural planning, allowing for climatic, edaphic and biotic conditions which will involve a new pattern of land use planning depending on the ecology of the area which a committee should be formed to undertake: b) waste land development involving non use of marginal land and waste land for crop production so that such land can be developed to synchronise with the fodder, fuel and environmental needs. This involves developing sub marginal land with a 3 tier system of plant growth — tree, 80

per cent fodder and fuel and 20 per cent timber, herbs and grass. The establishment of grass land with good quality grass and ferns is as important as planting trees to improve ecology. A decade long experiment in Kamarajar district has demonstrated that the establishment of large cluster of forest cover in the wind swept coastal and inland districts reclaims fallow lands and raises crop products. The government reports that ground water levels are rapidly declining in the country, resulting in severe water crisis in 54,310 villages in 15 states. Hence water tables are lowered in UP, Rajasthan, Gujarat, Maharastra, MP, Karnataka, Tamil Nadu and AP.

Import - Export Policy

The government set forth the new Import Export policy for 1988-91 in Parliament on March 30 with i) four objectives: a) to stimulate industrial growth and sustain modernisation, technological upgradation and internally competitive by easy access to imported capital goods, raw materials and components, b) to promote efficient import substitution and self reliance, c) to promote exports by improving incentives and their administration, and d) to simplify and rationalise policy and procedure. 2) The policy is for 3 years upto March 31, 1991, which is also the period of OGL licenses. 3) Capital goods will continue on OGL to which 99 items of machinery have been added and 5 items of capital goods shifted to the restricted list. 4) Where the machinery to be imported exceeds Rs. 25 lakhs, advertisements in Indian Trade Journal, Indian Export Bulletin and CIE Journal (which is new) must be gone through. 5) The import of

second hand new machinery is continued. 6) Allegedly to make exporters internally competitive, capital goods imports are permitted "not withstanding indigenous availability of such capital goods". 7) OGL available for import of computer systems. 8) Items under OGL has been expanded to 944 items, (adding 329 items) which permits imports under OGL of items not in banned, restricted, limited, permissible and canalised list. 9) The facility of repeat operations of supplementary licenses is continued. 10) 50 per cent of the raw materials/components needed by capital goods industry can be imported immediately. 11) A new procedure is introduced for import of spares by consultancy, designing and engineering firms implementing turn key projects. 12) State Electricity Boards/projects will be eligible to import emergency spares under OGL. 13) 26 items are decanalised and only items which are bulkable, or where there is a large number of small scale users or where there is advantage in canalising, are to be canalised for imports: 14) OGL for import of capital goods, raw materials and components is extended to railways, posts and telecommunications, doordarshan and AIR. 15) Special facilities to NRI to use OGL for import of capital goods to set up industries in the country are continued. 16) 209 items of life saving equipment and 108 items of life saving drugs have been put on OGL for import by all persons. 17) Import of video equipment for video software is continued. 18) A special chapter listing facilities available to small scale units for import of capital goods, raw materials, components, consumables and spares is provided. 19) Exporters can get import replenished licenses to replenish raw materials and components for their

exports and such REP licenses are freely transferable, provided with automatic flexibility, allowing import of Rs. 10 lakhs of capital goods. 20) An important innovation is the grant of deemed export benefits to all indigenous suppliers (called indirect exporters) of inputs to final exporters who will be eligible for duty free licenses. 21) The duty expansion scheme will permit duty free import of raw materials, components, consumables and spares meant for export production. 22) The facility of importing duty free raw materials and components available under the import-export pass book scheme to manufacturing exporters to export houses and trading houses has been extended to manufacturers well established in the domestic market. The new policy announced with the aim of increasing exports so that the huge trade deficit will be reduced quickly is not likely to achieve this objective. The basic feature of the new policy is to carry forward import liberalisation seen in the large increase in the item under OGL which will affect several important industries, notably the capital goods industry where the concessions have been expanded considerably. There is no attempt to cut back on imports which is the only way to reduce the large and increasing trade deficit. One of the significant provisions is the right to import capital goods and machinery even though they are available in the country. Further import facilities have been given to new groups of business houses and new incentives given to import more components, spares etc. The import liberalisation given in the last 3 year policy 1986-89 has not led to an increase in exports. That may well be the fate of this 3 year policy.

Foreign Trade

On the one hand the government reports a fall in the trade deficit for 1987-88, during the first 10 months, April-January exports were Rs. 12603 crores compared to Rs. 10,076 crores in April-January 1986-87 and imports were Rs. 18029 crores in April-January 1987-88 compared to Rs. 15,910 crores in the 11 months of 1986-87. So the trade deficit for 1987-88 (11 months) is Rs. 5426 crores compared to Rs. 5834 crores in the first 11 months of 1986-87. On the other hand the balance of payments position continues to be difficult because of the heavy encumbrances on the countries foreign exchange reserves. 72 per cent of foreign currency assets at December 1987 are obligated to IMF, non resident deposits in foreign currency accounted for 63 per cent. Hence the reserves fell further to less than Rs. 6000 crores by the third Friday of February, working out to nearly 30 per cent of imports in 1986-87. The government has established the export target for 1988-89 at 12-15 per cent higher than the expected 1987-88 level of Rs. 14,700 crores. On individual and specific issues the government in March decided to allow payment of disclosure fee as an enabling facility in foreign collaboration cases involving total technology payments exceeding Rs. 1 crore. The export list of fast moving cotton ready made garments under quotas to quota countries has been enlarged for which no CCS will be payable in 1988. MMTC has been asked to aim at an export target of Rs. 600 crores by 1990 which is double this year's exports. The government also reports that the capital goods imports during April-September 1987 was 21.4 per cent higher than the imports during that period in 1986, despite the import duty hike from 55 to 85 per cent. Unlike the Economic

survey which attributes the increased imports to buoyancy in the climate for industrial investment and upgradation of technology those dealing with the market state that the increased imports is due to severe price undercutting by overseas manufacturers who want to make sure that the landed costs of their goods are cheaper than those produced locally, and b) downstream user industries being so highly protected that even with the higher import duty, they are assured of a domestic market for their product.

Loans and aid

In March, the World Bank made a loan of \$295 million to ONGC for development of the western onshore, offshore gas project. India and West Germany signed an agreement in March for a loan of Rs. 112 crores for industrial development. The National Thermal Power Corporation has been permitted to get a loan of 62 billion yen from the Export-Import Bank of Japan. ONGC has been permitted to issue public bonds in the Swiss capital markets for 150 million Swiss Francs. The US has given Unicef \$25.5 million for India's universal immunisation programme. Four shipping companies are to receive a line of credit of £10 million from the Commonwealth Development Corporation through the Shipping Credit and Investment Corporation of India. The Indian Railway Finance Corporation has been permitted to borrow \$110 million in Japanese yen from the Export-Import bank of Japan. ONGC has been permitted to raise a \$300 million Euro dollar loan. As noted earlier Indian Foreign currency assets declined by Rs. 1163.7 crores by the third Friday of February when the reserves stood at Rs. 5981.5 crores from Rs. 7145.2 crores at the end of

March 1987. The fall in January was Rs. 785.1 crores and in February a further Rs. 378.6 crores. In addition to the reasons for this decline given earlier, the possibility of the trade deficit widening in January and February for which data is not available, must be taken into account.

International

IMF — World debt

IMF may set up a borrowing facility for developing countries which will enable debtor nations to get some discount in the valuation of their debt. Under this plan, the IMF debt facility will buy a portion of a country's debt at the agreed discount, giving its own bonds to the banks. The country's obligation will be to the Fund.

GATT — World trade

GATT reports that the world's 15 most indebted nations have recorded a 10 per cent increase in the export figures for 1987, unlike the 2.5 per cent increase forecast by it following the 3.5 per cent rate of the preceding 2 years. Overall during 1987 global trade in manufactures expanded by 5 per cent in volume and though agriculture output declined by 3 per cent, trade in agricultural products increased by 4 per cent. World trade in 1987 expressed in depreciated US \$ rose by 15.5 per cent to \$2450 billion. According to GATT the developing countries accounted for 20 per cent of the total 1987 trade, though the greater part was due to NICs and the small increase for the rest was not due

to less protectionism by the industrial countries but because of the rise in oil and metal prices which benefited Mexico, Chile and Peru. Whether the GATT hope that 1988 will record as good a growth in world trade as 1987 will depend on the Uruguay round holding back further protectionism and the restructuring of the international financial system and a viable strategy to deal with the third world burden of debt. A situation in which 75 per cent of the exports of 15 industrial countries and 65 per cent of those of 100+ developing countries feed the markets provided by the industrial countries cannot do duty for a truly world wide diffusion of goods and services. ILO reports that inflation symptoms are appearing in the industrial countries which dampens world trade and world economy.

South-South Cooperation

The South commission held its second meeting in Kaula Lumpur in March to further south-south cooperation. It called for unified action by the developing countries on the debt problem and urged them to take coordinated action relying on their own capabilities and resources to revive and sustain their economic development processes which have been seriously affected, particularly in regard to the deficiencies of development planning, allocation and utilisation of resources and management of public sector enterprises. The sharp deterioration in the international environment is seen in the crushing burden of external indebtedness, decline in export earnings due to decline in commodity prices, increasing protectionism, unstable currency markets and declining flow of resources from industrial to developing countries. In view of the stalled North-South negotiations, the standstill is

in international developmental cooperation, the creative potential of national self reliance and south-south cooperation must be fully harnessed, it states, and so calls for a careful reassessment of the role of the south as an actor on the global scene, including the role it could play as a new engine for sustaining the movement of economic expansion of the world economy. It also notes the widening income and development disparities between the industrial and developing countries, the new gaps emerging from rapid scientific and technological development, the increased emphasises by the rich countries on the role of the market forces and the diminished role of the states in the management of economic and social forces, the serious questioning of the principles of multilateralism and the recent instability of the stock market and the foreign exchange market. In light of this, the commission has decided that it will concentrate on issues of south-south cooperation, collective self reliance and south-north relations to achieve greater equity in a new world order. It states that the evolving situation contains a number of elements which if harnessed properly could provide the basis for a fresh start in devising a new global system of collective security, for which the commission could set in motion a fresh reassessment of policy, action and institutional initiatives by the developing countries, and enlighten and persuade an audience in the north, especially among those who make decisions about the consequences beyond the national and regional boundaries of their actions and decisions.

Asian Economies

The annual survey of the economies of Asia and Pacific by ESCAP begin

with the statement that the outlook for the world economy is uncertain because of the effects of October 1987 stock market crash with their possible negative impact on savings and consumption. It says that even with Japan's outflow of savings, the world economy is not suffering from a glut of savings but lack of proper allocation of such savings to promote growth and sustainable development. The developing countries in Asia and the Pacific continued to achieve satisfactory growth in 1987 despite uncertainties in global economy and unfavourable weather. The real GDP growth rate in this region rose from 4.6 per cent in 1986 to 6 per cent in 1987, with prospect of 5-6 per cent in 1988, because of recessionary trends in the world economy. The NICs in the region increased their growth rate to 11.7 per cent in 1987. Asian countries which faced low growth in 1985-86 revived in 1987 due to Philippines (4.9) and Singapore (8 per cent), China which recorded 7.8 per cent in 1986 grew at 9.5 per cent in 1987. South Asia was affected by drought. India's GDP slowed to 2.4 per cent (this is an optimistic estimate, as the government forecasts a growth of 1-2 per cent), Pakistan improved at 7.7 per cent, Bangladesh 4.5 per cent, Sri Lanka 2.5 per cent and Nepal 2.3 per cent.

World Food

The International Wheat Council reports that in 1987 wheat yields is 508 million tonnes below the consumption of 539 million tonnes. It estimates that stocks will drop sharply from 159 million tonnes to 129 million tonnes in 1987-88.

Bad weather curtailed output in USSR and China and Australian producers switched to other crops.

OPEC & International Jute Council

OPEC reports that it has under a study a plan to reduce its oil output by 5 per cent (850,000 barrels a day) to correct the fall in oil prices to \$13 — \$14 a barrel. Its official goal is \$18 a barrel, which it wishes to reach. There is difficulty in reaching agreement on the reductions by the 13 members. Meanwhile a meeting of non OPEC oil producers was held in March — though two of the largest producers UK and Norway, were not present — to agree upon a decisive position with OPEC. This was tried in 1985 and 1986 without success. The 9th session of the International Jute Council was held in Dhaka in March to review the current market situation and establish ways for its further promotion and to renegotiate the International Jute Agreement which expires in January 1989. 31 countries attended the meeting which decided to meet again this year to finalise the renegotiations process.

II. Agricultural Development in Tamil Nadu

Paddy, Land use and irrigation

Farmers in the state are in the closing stages of the harvest of the samba crop. The tail end farmers in Thanjavur district are short of water and want the government to press Karnataka to release more water into Mettur. The State government announced in March 6 concessions

World Employment

ILOs year book of labour Statistics for 1987 states that the world needs an average of 47 million new jobs every year for the next 4 decades if unemployment is to be wiped out. Between 1985 and 1986 unemployment fell in 31 countries but increased in 12 countries. Switzerland had the lowest unemployment at 0.8 per cent, China and Norway at 2 per cent and Japan at 2.8 per cent. In Asia, unemployment increased in Singapore from 4.1 to 6.1 per cent, while it fell in South Korea from 4 to 3.1 per cent. The downward trend was in Latin America in 11 out of 13 countries. Though the proportion of women in the work force rose in many countries in 1986, unemployment was more severe among women than men in all countries — being double among women compared to men in Latin America and the Caribbean. In developing countries women's employment varied from 6.2 per cent in Niger to 39.8 per cent in South Korea. Women comprised 40 per cent of the employed population in the industrialised West ranging from 29 per cent in Spain to 44 per cent in US and 47.6 per cent in Sweden.

to drought hit farmers in the state : a) Time till August 30 to pay electricity charges : b) on disconnection of electricity for non payment of dues for period ending February 1988 : c) disconnection to be reconnected : d) in other cases reconnection on payment of 50 per cent of the dues : e) distraint proceedings suspended until

further orders on collection of land revenue and f) no coercive process for collection of cooperative loans. The farmers welcome these reliefs in the midst of their many difficulties. The TN Federation of Mill Owners Association has urged the government to reduce the level of its paddy procurement to the level in other states, which would mean procuring 4 lakh tonnes per annum both to increase the supply of rice in the market and improve its price. A study of the 9 fold use of land in southern Tamil Nadu comprising the districts of Anna, Madurai, Ramanathapuram, Pasumpon Muthuramalingam, Kamaraj, Thirunelveli, Chidambaram and Kanyakumari over the 25 years 1957-58 to 1981-82 shows : a) an apparent increase in forest cover from 9.5 per cent to 12.9 per cent during the period, that is at 3.4 per cent per annum which is good provided the definition of forest conforms to real tree cover (which it does not) b) a sharp decline in barren and uncultivable land from 8.8 per cent to 3.6 per cent, that is by minus 5.2 per cent per annum, which reduces pasture land as will be seen later : c) an increase in land for non agriculture use — towns, factories etc from 7.9 per cent to 14.9 per cent at 7 per cent per annum which takes away land from agriculture and which is one of the effects of industrialisation : d) reduced cultivable waste from 7.3 per cent to 2.9 per cent, at an annual — 4.4 per cent which is the result of drought and dry land farming ; e) the decline in permanent pastures from 4.4 per cent to 0.9 per cent an annual decrease of minus 3.5 per cent which results in cattle not having pastures and grazing in forest and other agricultural land : f) a reduction in trees and groves from 2 per cent to 1.2 per cent which is a minus 0.8 per cent per annum which

makes the figures for forest suspect: g) current fallows increased from 10.5 per cent to 13.8 per cent at an annual 3.3 per cent which might also be due to failure of the monsoon : h) other fallows with a decline from 7 per cent to 6.4 per cent at minus 0.4 per cent which might indicate an increase in cultivated land which must be welcomed : and i) net sown area which increased marginally from 42.6 per cent to 43.3 per cent at an annual 0.7 per cent, reflecting in above factors. Thus the southern part of the state is losing in agricultural use of land which calls for special attention to this fact in the area. On the irrigation side the government reports that 5 irrigation schemes costing Rs. 44.99 crores and benefiting 77,136 hectares are being completed by March 31, 1988 and another 5 schemes costing Rs. 39.70 crores benefiting 12,519 hectares will be completed in 1988-89. This is good news for the farmers and the plan to complete 7 schemes costing Rs. 71.23 crores benefiting 10,011 hectares in the last year of the VII Plan if adhered to will make a turning point in the major irrigation in the state. The schemes in Pudukottai and Kamarajar districts, costing Rs. 112 crores, are being undertaken at a crash basis. To this should be added the tank modernisation programme referred to earlier and the second stage of the Periyar-Vaigai modernisation project which will be completed in April 1989, with some financial aid (\$35 million) from the World Bank.

Research results

In March the research reports cover the Molokolukulu variety of paddy released by the Nellore Agricultural Research Station, the means of improving

green gram yield through spacing and seed, fertiliser use and inter-cropping by agricultural research station at Kovilpatti, economic weed management techniques developed by Tirunelveli Agricultural College, the identification and means of control of leaf and pest caterpillar on sesamum by AP agricultural university, field experiments in herbicide application by TNAU, seed treatment to ensure plant disease control by UAS, Bangalore, the development of sunflower as a profitable rainfed crop by SV agricultural College Tirupati, the extraction of Tuberose oil from Tuberose flower by the Oil Technological Station at Anantapur, the right pruning practice in grape vine developed by a Madras horticulturist, the methods of controlling tobacco stem borer developed by the agricultural research station Bhavanisagar, the polybag planting of rubber seedlings by the Kottayam Rubber Board, the chemical method of pruning to induce the formation of lateral branches in young tea crops developed by Toklai station, Jorhat, the process to be used to convert agrowaste into fuel by IIT, New Delhi, the efficient spraying equipment for groundnut and other land growing crop worked out by ICRISAT, Hyderabad, the discovery that the removal of eye stalk induces shrimps to breed made by TNAU's Fisheries College at Tuticorin, the successful experiment with sulphur nutrition at UAT, Kanpur, the varying water requirements of different sugar cane varieties noted at the sugarcane research institute at Lucknow, the means of preventing salt poisoning of fowls worked out by TNAU's Live stock Research Centre, Tirunelveli, the golden hued hybrid fish as a means of intensive fish farming and the package of technology to maximise fish production as developed at Chingleput, proper sanitation as a means of tetanus prevention developed by the College of Veterinary and Animal Sciences,

Tiruchi, the use of a local weed, palsamudram, which grows rather profusely and is regarded as a menace by farmers, as manure to provide inorganic nitrogen in paddy fields as demonstrated by The Regional Agricultural Research Station at Jaghal, and the simultaneous paddy cum fish culture as a highly productive system where water is plentiful available as developed by ICAR's North East Hill region complex.

Tea

In regard to tea, there are two issues to be noted. First, the 1987-88 drought had no effect on tea output. Tea gardens in the North had floods and in the south occasional rains, so that tea output in 1987 was actually a new record of 673.3 million kg, the previous peak being 659 million kg in 1985. North Indian output was 527.4 million kg against the previous year's 485.1 million kg and that of the south 145.9 million kg against the previous year's 139.5 million kg. With international tea prices remaining high, exports of 210 million kg earned Rs. 639 crores against the 1986 export of 206 million kg earning Rs. 601 crores. UPASI however reports a steep decline in south Indian exports from 67 million kg in 1984 to 54 million kg in 1985, 45 million kg in 1986 and an estimated 33 million kg in 1987 due to the traditional overseas buyers UK, Egypt, Iraq and USSR cutting back on the demand. The output for internal consumption is an adequate 463 million kg. The second issue is the many incentives granted to tea during 1988-89 which should further improve production. The budget has given i) full export rebate to tea when exported directly from gardens or warehouses (why merchant exporters have been excluded from this concession is not clear); 2) green tea complete exemption from

export duty; 3) promise of simplification of procedures for claiming excise rebate by merchant exporters for unblended tea; 4) producer exporters exemption from paying the higher 1 Re excess; 5) reduction in fertiliser prices and pesticide intermediaries exemption from excise; 6) a reduction from 25 to 15 per cent in excise on aluminium foil, and 7) the exemption from the 5 per cent surcharge on excise. It is to be hoped that these concessions will help tea exports to increase in volume terms, which it has not done for some years. In this connection the announcement of the tariff rates of excise on packed tea, tea bags and essence of tea seems ill conceived as it is a tax on value added which exports should encourage.

Coffee

Coffee output estimates for 1988-89 indicates that on the basis of a bumper harvest there will be a record production. Hence the expanded export of 2200 tonnes of instant coffee to the USSR at prices above the average world market price is a move in the right direction. The increase in the capacity of the instant coffee industry is needed and sound, only India will have to use, like other instant coffee producers — lower grade as one means of lowering its price and increasing its sales both domestically and internationally. This is particularly urgent as with the record output expected, the problem of unsold coffee stocks from this year's drought affected supply will worsen. The concessions given by the 1988-89 budget to tea, referred to earlier apply also to coffee. But one provision — the increase of 30 per cent in the excise on instant coffee, will have a negative effect on prices and demand which need to be reviewed.

Rubber

Rubber production in 1988-89 is expected by Rubber Board to increase to 2,55,000 tonnes from 2,35,000 tonnes in 1987-88, and the gap from demand will be 56,000 tonnes which will have to be made good by imports. It is on the long term estimates that there is rather sharp differences. The Union Ministry of Commerce's working group on plantation crops has projected a surplus of 30,000 tonnes by 2000AD: the Rubber Board basing itself on a doubling of production sees a shortfall of 40,000 tonnes at that time. Now a study on Natural Rubber supply in India — scenario upto 2000AD prepared by the Secretary General of the International Rubber Study Group has two scenarios: the low one is supply of 3,50,000 tonnes in 1995 and 4,80,000 in 2000 and demand of 4,90,000 tonnes and 61,9000 on these dates on the assumption that there will be a vigorous, sustained and dynamic increase in supply: if the supply is on traditional lines, the high scenario will operate under which demand will be 5,38 000 in 1995 and 7,16,000 tonnes in 2000. Whatever be the scenario, the country's dependence on imports of natural rubber will continue into the next century. This can be reduced if more synthetic rubber is used: but the cost of synthetic rubber is much higher than that of natural rubber. This differential will widen, if the government reduces the price of natural rubber from its present Rs. 16.5 — 17.5 per kg (as recommended by the finance ministry) while the International study group's estimate is that cost of production of natural rubber is only Rs. 9.42 per kg. This question of the production cost of natural rubber and the prices of the rubber in the buffer needs to be examined afresh by a group comprising rubber users (who were not associated with finance ministry), the commerce and finance ministries. In 1988-89

the Rubber Board announces that it will provide subsidies to large and small growers for setting up irrigation

facilities — Rs. 3500 per hectare for small and Rs. 1500 per hectare for large growers.

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III. Industrial Development in Tamil Nadu

Salem

The Union government reports that it has (finally) cleared the second sendzimir mill for Salem which will increase its capacity from 32,000 tonnes to 65,000 tonnes of cold rolled stainless steel sheets, apart from 5000 tonnes per annum of hot rolled (see vol. XVIII p143) and was cleared on March 2, 1988. When the second mill is installed the demand for stainless steel will be 2.8 lakh tonnes per annum of which Salem will supply 91,000 tonnes. The possibility of installing hot rolling facilities at Salem at a cost of Rs. 290 crores which will help make high value products other than stainless steel is under consideration.

HPF

The Hindustan Photo Films is setting up an integrated plant for manufacture of audio, video, MSR films and computer tapes with an investment of Rs. 9.25 crores. HPF has also commenced a project for the manufacture of polyester based x-ray, industrial x-ray and graphic art films at an outlay of Rs. 168.12 crores which will be completed in 5 years. The magnetic tape plant which will be commissioned in 1988 will meet the country's demand for professional grade types for different application.

During 1986-87 it earned a net profit of Rs. 6.81 crores with a total production of 12,549 million square metres valued at Rs. 125.53 crores, a turnover of Rs. 119.07 crores, earning foreign exchange of Rs. 41.19 crores. Its Rs. 1.97 crores R&D unit is nearing completion and will enlarge its scope.

Naptha Cracker Plant, Tamil Nadu Minerals and ONYX Marble

Besides the aromatic complex planned at Manali with MRLs feed stock (see vol XVIII p144), the government is making a case for a naptha cracker unit to give a thrust to the development of petro chemical industries in the state. This is a long pending demand for a merchant naptha cracker unit of 5 lakh t pa. This would be a joint sector product promoted by TIDCO based on propylene from MRL which will manufacture propylene glycol oxide, propylene glycol and polyols and will start production by 1989. Other units to come up based on MRL feed stock are methyl ethyl ketone, nonyl phenol etc. Tamil Nadu Minerals (TAMIN) reports that it is utilising the state's mineral resources for export and for meeting the needs of domestic consumers. The mining of raw granite and production of cut and polished granite for export is on the increase. The Union government has been approached

for a letter of intent for an export oriented project of graphite crucible with an outlay of Rs. 24.25 crores. In 1986-87 TAMIN's turnover was Rs. 830.43 lakhs and gross profits before depreciation and interest were Rs. 299.76 lakhs. In SIDCO's Ambattur industrial estate, ONYX marble for manufacturing synthetic marble products based on synthetic resins and polymar concrete is operating manufacturing bath tubs, kitchen services and other items. The marketing is done by EID Parry.

MRF and Engineering Units

Madras Rubber Factory (MRF) with its 4 plants at Tiruvottayur, Kottayam, Arkonam and Goa reports a wide ranging production effort—from wheelers to aircraft tyres. During the last 2 years its sales increased from Rs. 200 crores to Rs. 300 crores and profits from Rs. 2.49 crores to Rs. 10.10 crores. The future prospects include a wide range of tyre and tubes covering trucks, Maruti, contessa etc and a modernisation programme. A CEI survey of the engineering units in the state reports a good and expanding record, which the cut in sales tax rates has brought about. It has increased the competitiveness of the state's energy units and has stopped the migration of units to other states. A heavy vehicles company has increased its sales from Rs. 94.39 lakhs in 1986-87 to Rs. 108.41 lakhs in the first 11 months of 1987-88. So too are a Tiruchi auto component unit, a Coimbatore steel casting unit and a Madras electronic company and a switch gear unit realising expanding sales and orders. On this basis which also increases the government's tax receipts CEI recommends that the government widen the scope of the tax reduction to cover more goods.

SISRF

The State government has founded the South India Sugar Research Foundation (SISRF) to promote R & D in sugar and allied industries and help them benefit from the latest fabrication and manufacturing technology. The state is a major sugar producer, after UP and Maharashtra. Of the total sugar production of 85 lakh tonnes in 1986-87, the four southern states and Pondicherry produced 21 lakh tonnes (25 per cent). Of the 355 factories in the country, Tamil Nadu has 25, Karnataka 24, AP 31, Kerala 2 and Pondicherry 2. The Foundation's first task is to establish a sugar research institute covering an area of 80 to 100 acres in one of the 3 districts—Thanjavur, North Arcot and South Arcot. The Foundation will function in a few months. It will cover agricultural aspects as well as designing, fabrication and testing of equipment and machinery for the efficient extraction of sugar. This will result in energy conservation, low maintenance cost and low inventories. SISRF is the third sugar research body which has a wide mandate, including establishing agricultural colleges, following the National Sugar Institute in Kanpur concentrating on breeding techniques and the Deccan sugar Institute at Pune working on cane development.

MEPZ, SSIs and Foundries

MEPZ reports that its Board of Approvals has cleared 5 more application, taking the total units to 91. The new units is for recharging dry cells, switches, synthetic rutile, knitted garments with France, German and Japanese collaboration. It also states that its exports are over Rs. 25 crores by 17 of the 21 units in the zone. The exports being engineering goods, perfumery, garments, computer soft ware, leather goods, jewellery to US, Canada,

UK, France, West Germany, USSR, Japan, Norway, Sweden, Denmark, Finland and Italy. As part of a crash programme to revive and rehabilitate SSI units which are sick, the government has announced a plan to help 1000 units in the next 2 months. In this the Banks are to furnish district wise details of units identified for revival. 400 foundries in Coimbatore are languishing and facing closure due to lack of raw material. The Coimbatore small Foundrymen Association and CODISSIA report that SAIL has told them that from April 1988 they will be supplied only 47 per cent of their previous offtake of pig iron because of the short fall in production in the plants. Here there is the danger of many of the units going sick for no fault of theirs — they have the infrastructure, the fixed capital and the manpower. This requires the attention of the Ministry of Steel.

Handlooms

The State government has taken a series of steps to bring down the price

of yarn and make yarn available to handloom weavers. The government has taken action against hoarders and speculators, 5000 bales of yarn per month is being supplied by SIMA, another 5000 bales is provided by the cooperative spinning mills, South India viscose is supplying 25 tonnes of art silk per month at 10 per cent less than the market price. To improve the liquidity position of primary cooperative societies and the apex body, Cooptex, the government has released Rs. 10 crores towards rebate dues and another Rs. 14 crores towards reimbursement of the cost of free supply of sarees and dhotis to landless labourers under the scheme 'yarn for power', additional power of 7 mu is supplied to cooperative and private spinning mills who supply the yarn. The yarn is being supplied to the weavers at a floating rate linked to the prevailing market price and the cost advantage arising out of the extra power supply from TNEB. This avoids the past experience of a fixed yarn price which resulted in its not being lifted wherever the market price fell.

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IV. Education, Science and Health

Educational reforms

The second meeting of CAGE to review the execution of the National Educational Policy (NEP) was held in March 1988. The meeting reviewed the major elements of NEP — Operation Black Board, Non formal education, Navodaya Vidyalayas, the National Literacy mission and Vocationalisation. The report of the government on these

issues shows some progress but a number of lags — in the National Literacy mission for which there are no upto date statistics so that it works on the 1978-79 All India Educational Survey. Operation Black Board is ready to take off but lacks reliable cost estimates. The SC/ST emphasis is beginning to take affect, the most progress made is on Navodaya Vidyalaya — which this Bulletin has stated is not a priority.

The two issues on which the Union government is insistent is a) the lack of funds. This again is a subsidiary issue. But the government wants the states to make a strong case for more funds from the IX Finance Commission and b) the strategy for the VIII Plan the minister states that there should be a CAGE working group which is to be set up. The UGC committee on Banaras Hindu University has suggested autonomy for the university departments and for this purpose wants the University Act amended to regroup the departments into a number of autonomous institutes with adequate academic, administrative and financial powers. It also recommends restricted admission to the undergraduate courses and the setting up of a Planning Board as the principal planning agency of the university. The Annual Report of the Ministry of Human Resources Development states that enrolment in colleges and universities rose from 35.71 lakhs in 1985-86 to 36.82 lakhs in 1986-87 — women students increasing marginally from 10.59 lakhs to 11.25 lakhs. To improve the quality of higher education and remove disparities in enrolment of weaker sections, it says that a National Council for Higher Education is being set up under UGC. A study of the post graduate examinations of the Madras University over the last 3 years shows a very poor record. In 1987 March-April a total of 4260 candidates sat for the MA degree, of whom only 1349 passed, 774 took the M Com examination and 172 passed, 2276 sat for MSc and 921 passed. In 1986, 3198 sat for the MA and 911 passed, 1852 for MSc and 556 passed and 624 for MCom and 157 passed. In 1985 the figure are MA 4143 with 1062 passing, MSc 2675 with 628 passing and MCom 879 with 159 passing. The

reasons given for this poor performance are i) the PG courses do not attract the best students, ii) the few good students do not complete the course when offered a job, iii) standards of PG courses have been increased. The major reasons is lack of hard work by staff and students. The admission policy is criticised as also the quality of teacher. The under graduate courses have the same record. Out of 4234 BA candidates only 1155 (27 per cent) passed (women do better at 53 per cent), out of 5774 BSc men candidates 1396 passed (while out of 3881 women 2171 passed). The record in 1986 and 1988 is similar. In the Senate, the need to develop centres of excellence, generate adequate data for future plans, the regrouping of existing expertise into emerging newer areas of study by setting up a centre for Biotechnology, a Centre for Material Sciences and a Centre for Integrated Rural Development were emphasised.

Technical education

The first group of 200 five year BL students have graduated this summer and will be entering the legal profession. Their competence in relation to the 3 year graduate course will be under scrutiny. A group of doctors who appeared for the all India post graduate medical entrance examination have alleged large scale discrepancies and arbitrary procedures in the preparation of final merit list. The publication of marks has been demanded. While over 20,000 candidates sat for 1200 MD/MS/BDs/Diploma courses, only 600 were declared successful. As per the Supreme Court directive the 25 percent seats from out of the all India quota cannot be transferred back to the respective medical colleges. To cover all this for central quota, it is demanded that the cut off be reduced. The Agricultural

University announces that it will start an MSc course in agricultural biotechnology for which the union Department of Biotechnology has given a grant of Rs. 68.94 lakhs. The question of revision of pay scales for IIT teachers is the subject of controversy. The IIT review committee is of the view that the IIT staff should have a higher remuneration than the Mehrotra Committee recommendation as applied to all universities and should be linked with the faculty performance so that a differential pay scales and recruitment standards for IIT faculty will be maintained. The All India Council of Technical Education recommends uniform pay scales for technical institutions and universities. The Ministry of Education states that the government is not able to go beyond the Mehrotra committee scales. Now the matter is with the cabinet. The Council of IIT had recommended an increase in the fees which will make IIT education more expensive and will follow the sound principle of higher education paying its way. More generally the 1988-89 budget for technical education has declined to 141 crores from Rs. 173 crores in 1987-88 partly because the increase was used for modernisation of equipment for colleges and partly because of the large carry over.

Science

The major event in March was the launching of India's first indigenous Remote Sensing Satellite (IRS-IA) from the Baikanour Cosmodrome in USSR. The satellite has now gone into orbit and is sending back data on India's resources. Indian scientists have returned after a 70 days stay in Antarctica where they had established a second research station, 'Moitree' 200 km from the

south pole. CSIR reports establishing a Centre for Mathematical Modelling and Computer Stimulation at the National Aeronautical laboratory in Bangalore, which will also bring professional mathematicians into the mainstream of scientific research. ISRO reports that it has developed or scaled up the process knowhow for a variety of products used primarily in space technology but which is also transferred to 7 groups, of industries such as Microwave combine pass filters, relay parameters test, photocentre system, drum scanner digitiser etc. The National Informatic Centre has been transferred from the Department of Electronics to the Planning Commission, in accordance with the recommendation of its review committee, as the main function of the centre is to develop a data base at the block and district level with the help of the 4 large computers established at Delhi, Pune, Bhubaneswar and Hyderabad as the 4 nodes of the net work, with Delhi as host, and 25 other centres under the net work including 8 district level systems. From April, NIC is installing computer systems by district starting with Tamil Nadu. In this first phase, mini computer systems or a local Area Network (LAN) cluster of mini computers/super ATs are to be installed in each of the 32 states capital and UTs. Consolidation of district information pertaining to the districts would be done by the various district level agencies on super AT computer system, communicating with state level systems. 439 districts are to be covered along with 5000 blocks which are the generators of basic data and implementors of plan schemes for which they will be equipped with PC terminals. Government has approved the second technology mission of C-DOT involving development of 512 post main exchanges

and enhancement of software, valve engineering etc, of exchanges as already developed. The heavy water plant at Baroda suffered an explosion and a major fire in its high pressure section and has been closed. A high level review committee has recommended full autonomy for the Indian Council of Agricultural Research along lines of the Atomic Energy Commission and Space commission.

Health

The Union government statement in the Lok Sabha that according to the Registrar General's sample registration the birth rate has fallen from 33.9 in 1984 to 32.9 per 1000 in 1986 should be examined in view of the poor performance of the Hindi belt in family planning. Primary health care which is the core of the government's health policy

has not achieved its target. Of the 3 constituents, as at January 11, 1988 in sub centres, only 1684 have been, established against a target of 9233, in primary health centres, only 2220 are established against a target of 22074 and in community health centres, only 22 are stationed against a target of 257. This 10-12 per cent performance is depressing — only one major state Maharashtra has achieved 25 per cent for sub centres and only 6 major states have achieved 50 per cent of the target. This is surprising because sub centres are fully financed by the Union government. Against this background, it is good that Tamil Nadu is establishing 82 primary health centres in the state at a cost of Rs. 117 lakhs during 1987-88 in addition to the existing 698. The government has also decided to set up a hospital exclusively for treatment of ENT cases adjacent to the peripheral hospital in Anna Nagar at a cost of Rs. 50 lakhs.

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V. Employment and Labour Relations

An important step in the matter of delinking degrees from jobs has been taken in March by the General Insurance Corporation. A few selected schools affiliated to the CBSE in Delhi, Bombay, Calcutta, Madras, Chandigarh and Lucknow will introduce a 2 year vocational course in General Insurance and allied subjects for students passing the 10th standard with a minimum of 60 per cent marks. The case will be gradually extended to all +2 courses under CBSE. Student passing the 2 year +2 course with a minimum of 50 per cent marks will be appointed by the General Insurance companies as Apprentice Assistant with a stipend of Rs. 1000 a month. After successful com-

pletion of apprenticeship of one year they will be absorbed as regular assistant with a starting salary of Rs. 1200 in class A cities and Rs. 1227 in other places without undergoing the usual all India competitive examination, suitable weightage for vocational qualification will also be given for further promotion as officers. Those passing the 2 year course with not less than 40 per cent marks will be eligible to compete for the posts of Assistants as per the normal procedure. Now other commercial and industrial establishments should follow this significant initiative of delinking degrees from jobs and encourage job orientation at the +2 level.

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VI. Other Items

Sri Lanka Repatriates, SRC & TNBCE

In March was established a National Council for the rehabilitation of Sri Lanka repatriates, of whom there are more than 1 lakh living in very difficult conditions, without houses, without employment and inadequate food and schooling. The Council has drawn up a programme for voluntary agencies to enter and actively participate in the governments programme of building houses and providing employment for the repatriates. The Governing Body of the State Resource Centre reviewed the activities of the centre for January and February and approved the budget for 1988-89 as well as the new salary scales. This was followed by a meeting of the executive committee of the Tamil Nadu Board of Continuing Education which reviewed the work of the agencies and decided to add a fourth regional representative to its bi-monthly meeting. It reviewed and approved the work of the Board for the National Literacy mission training programmes through printing of materials.

Rotary West and South India Chamber

A meeting of Rotary west held in Ashoka Hotel reviewed the 9 major economic issues which face the budget for 1988-89, leaving it to the members to judge how far the budget met these needs. The South India Chamber of Commerce and Industry had a meeting on the 1988-89 budget. The main point made was that the budget with its very heavy deficit would further inflation.

TNSCS & T

The Executive Committee of the Tamil Nadu State Council of Science & Technology met and reviewed the progress of the 5 projects sanctioned in 1985-86 and the projects being launched in 1986-87. It also reviewed the conclusions of the 3 workshops held during the year and approved the budget for 1988-89. The full council met at the end of the month and reviewed the work of the executive committee and decided to concentrate on rural development and renewable energy in 1988-89. It also approved the audited accounts for 1986-87. In accordance with its decision, a meeting of Vice Chancellors and members of the council was held to review the two surveys undertaken by the Bharathidasan University on the state of social sciences in Tamil Nadu and by Anna Universities on the state of engineering and natural sciences in the state. In this first discussion it noted the low level of the social sciences and stressed the need to develop centres of excellence. The engineering and natural sciences are in a better state but they too need to be developed into centres of excellence. It was decided that the group will meet again at the end of April to make its recommendations to the State Council of Higher Education.

Reader's Digest and IIC

There was the meeting of the Board of Directors of the Reader's Digest. The work of the Digest over the 3

months was reviewed and the budget execution noted. The Board decided on an interim dividend in 1987-88. The India International Centre had its monthly panel discussion in mid March on the Latin American Free trade Association. It was noted that the regional organisation had set itself high goals—integration of the economies of the countries which has been difficult to achieve.

Shri Ram Centre and Assocham

The Shri Ram Centre organised a national seminar on technology, productivity and industrial relations. The main point made was the capability of technology to modernise industry and raise its productivity and the need for its acceptance by the trade unions, with the consequence that there will be some unemployment created. It was also agreed that similar seminars should be organised at the plant level. Assocham organised a National workshop on the long term policy of resource mobilisation. There were excellent presentations of the macro problems faced by industry and commercial establishments in a money market where resources are fast diminishing. This was followed by a detailed outline of the means to be developed to mobilise resources from the private sector and make the capital market more buoyant. The problems faced by banks in this situation of the resource crunch were, also well outlined. The general conclusion was that the resource crunch

is here to stay for the VIII Plan and and so there must be economy in resource use and increased productivity.

April Development Seminar

The paper for the April seminar "Policy Option for Slum Improvement" by Michael A. Slingsby together with the summary of the discussion on the paper at the seminar Chaired by L. M. Menezes appears as the first article.

Second Article

A note on the budget 1988-89 appears as the second article.

Book Review

A Review of Indian Agriculture : A Policy Perspective by B. M. Bhatia appears in the Book Review Section.

Special Section

As this is the combined May & June issue of the Bulletin, the first special section of the year appears in this copy, setting forth the results of the Eighteenth Census of Social Science Research in South Indian Universities and research institutions. For 1987-88 which is covered in this issue, the research in 17 universities 6 research institutions and 2 colleges is reported. Further details may be seen in the special section.

MIDS News

The annual meeting of Ph.D. Scholars and Guides was held at the Institute from the 19th to 22nd April. It was attended by nearly 40 Ph.D. scholars from different parts of the State. A few candidates working on aspects of Tamilnadu's economy in the Centre for Development Studies, Trivandrum and the Institute for Social and Economic Change, Bangalore also attended the Workshop. In addition, 10 recognised Ph.D. Guides from various universities and colleges of the State also participated.

The external resource persons at the meeting were Prof. Ashok Rudra, Shantiniketan University; Prof. Krishna Bharadwaj, Jawaharlal Nehru University and Prof. Suresh Tendulkar, Delhi University. Prof. Rudra gave two lectures, one on Research on Agrarian Structure and another on survey methods in Social Science Research. Prof. Bharadwaj spoke on different theoretical perspectives regarding agriculture-industry linkages and the formation of the labour market. Prof. Tendulkar's lectures were on the uses of models in national planning and on the factors determining regional variations in the incidence of poverty.

Apart from these special lectures, there were group discussions for which the participants were divided into 3 sections. The first was on agricultural and the rural economy, the second on industry and urban related issues and the third on income distribution, fiscal policy, anti-poverty programmes etc. The research problem of each of the participants was discussed in the sectional meetings in which the external resource persons, the faculty of MIDS and other Ph.D. Guides also participated. The scholars also had opportunities for individual discussions with the resource persons and guides.

In the concluding session, participants reviewed the meeting and made suggestions for the future. Suggestions included the desirability of giving more time for individual discussions, affording facilities of photocopying lecture material, more emphasis on lectures dealing with researchable issues in different areas etc.

Mr. T. C. Mohanam, Research Scholar of the Institute conducted a seminar on "The role of small scale industry in

Indian Economic Development" in the Institute on 13th May.

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The Eighteenth Interdisciplinary Research Methodology Workshop organised by the Institute in collaboration with the Indian Council of Social Science Research was held at the Bharathiar

University, Coimbatore from June 8 to 11. For the third year in succession, the main theme of the Workshop was "Science, Technology and Society" with special emphasis on the positive contributions of the science and technology in different spheres of social activity. The following seven papers were specially written for the Workshop as background material:

Author	Area
1. P. Chandra Stanley Medical College, Madras	Health Care
2. R. Jayagopal University of Madras, Madras	Education
3. T. S. Kannan Formerly Ashok Leyland, Madras	Industry
4. Nira Ramachandran Bangalore University, Bangalore	Urban Renewal
5. Sima Sharma Editor, India International Quarterly New Delhi	Communication
6. V. K. S. Varadan Formerly Director General, Geological Survey of India	Environment
7. A. Vaidyanathan, MIDS.	Agriculture

The workshop was attended by 26 participants from various universities and research institutes in South India. They belong to the disciplines of agriculture, anthropology, economics, education, geography, geology, Journalism, management, medicine, philosophy, physics and sociology.

The Statement of the Workshop will appear in the August issue of the Bulletin.

Dr. C. T. Kurien lays down office as Director of the Institute at the end of June on completion of two five-year

terms. Dr. Kurien will continue in the Institute as Professor. The new Director of the Institute who will be taking up office on 1st July is Dr. A. Vaidyanathan, now Professor in the Institute. Dr. Vaidyanathan is one of the leading economists in the country and has received international recognition for his incisive analyses of agricultural growth, the bovine economy and regional development. Before joining the Institute in 1984, Dr. Vaidyanathan was at the Centre for Development Studies, Trivandrum and prior to it was an economist in the Planning Commission.

April Development Seminar

Policy Options for Slum Improvement

by

Michael A. Slingsby
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Introduction

The purposes of this paper are to examine current slum improvement policies, to identify the inputs that are required if an improvement in the health of the slum communities is seen as the main objective, and to analyse the slum improvement, health and community development programmes that are currently being implemented in Hyderabad and Visakhapatnam. In the latter case, the programme inputs attempt to achieve an integration of the slum communities into the physical fabric and economic and social networks of the cities. Lastly, the paper looks at slum improvement within the context of urban housing policies. There is very little empirical evidence to support the arguments presented in this paper and its

main purpose is therefore to discuss issues that may affect policy and to identify areas for further research.

Government of India Programmes

The slum improvement programmes of the Government of India have mainly focussed on the low cost provision of infrastructure services in slums that are located on publicly owned land. The inputs have included the provision of street standpipes, public conveniences, street lights, storm water drains and hard surfaces to roads and footpaths. The amount that can be invested in any slum has been a function of the population and a per capita cost ceiling of Rs. 300.

Madras Urban Development Projects

Under the world Bank funded Madras Urban Development projects, the following inputs were included:

- security of tenure through the issues of pattas usually on the basis of existing areas of occupation,
- provision of street standpipes at a rate of one for every ten households,
- public latrines and bathing facilities at the rate of one toilet and one bath for every ten households,
- provision of sullage and surface water drainage,
- provision of vehicular access to within 50 metres and footpath access to each house,
- street lighting to the standard of one light for every 40 m of path or road,
- education facilities on the basis of one pre-school plot for 200 households, one primary school for 3000 people and one secondary school for 10,000 people,
- provision of cottage industries with a target of providing employment for 10% of the labour force of the slum dwellers,
- funding of a maternal child health scheme (1).

In practice it has not always been possible to meet these standards, due to land constraints on site, the existence of small slum pockets, apparent resistance of the slum communities and the existence of some of the facilities in the surrounding areas. In both programmes, the objectives have been seen in terms of the physical amenities themselves. The assumption has been that the needs of every slum are the same

and there has been very little community involvement in either planning, implementation or management of the programme. The programme is largely an engineering exercise with the role of community development being in terms of persuading people to accept the programme. The programme inputs have been explained to the communities on a "take it or leave it" basis with little or no possibility for changes or modifications.

The communities have been asked to accept a programme which does not necessarily reflect their needs and priorities and in some areas provides amenities which are below their standards of expectation. As a result, many of the assets created have not been maintained and there has been strong resistance to the collection of service charges. The general restrictions on water supply in the city, from which the slum dwellers suffer the most, has further exacerbated an already difficult situation. Both the Government of India and the World Bank funded programmes have aimed at covering the maximum slum population within a fixed ceiling of resources. Although it can be argued that the slum dwellers now have marginally better access to basic services and amenities, in most cases the slum areas have remained as slums and many of the fundamental problems still remain. Apart from the provision of basic services there has been little attempt to meet slum families other priorities of improvements in income, better access to educational facilities, preventive and creative medicine and better housing.

Problem Solving Approach

Instead of seeing the objectives of the programmes as the provision of

physical amenities a problem solving approach could be used in identifying objectives. For example, objectives may include:

- improvement of the health of families living in the slums,
- improvement of educational levels of the slum families,
- development of opportunities for employment and income generation.

In order to achieve any of these objectives, a linked package of inputs is required to be made in the same slum at the same time.

To illustrate this, if our objective is to improve the health of families living in the slums, the inputs required may include the following:

Health education and awareness programme:

- personal and environmental hygiene,
- importance of preventive medicine, particularly immunisation for children,
- simple curative techniques such as oral rehydration,
- purification and storage of drinking water,
- knowledge of the sources of common diseases, particularly water borne diseases and simple preventive methods,
- importance of a cheap, balanced and nutritious diet,
- encouragement to breast feed young babies.

Vermin and insect control:

- Programmes may include fly cockroach and mosquito eradication through chemical spraying, the draining of stagnant water, and hygienic disposal of household refuse,

- extermination of vermin such as rats and mice.

Physical improvements:

- adequate water supply for drinking, washing of vessels and clothes and for cleaning toilets,
- provision of toilets, preferably one for each family, and means of sewerage disposal,
- drainage of storm water, sullage water from bathing, cooking vessel and clothes washing areas as well as the drainage of surplus water from street standpipes and hand-pumps,
- provision of individual bathing areas, especially for women, and clothes washing areas,
- construction of all weather roads and footpaths with hard surfaces that limit dust formation and be easily kept clean,
- construction of clinics and health centres,
- provision of containers or bins for household refuse disposal.

Health facilities:

- services of doctors, nurses and health workers,
- supply of medicines and effective referral services to hospitals.

Pollution:

- control of sources of air and water borne pollution,
- collection and disposal of refuse.

Housing improvements:

- the prevention of dampness from the ground,
- repair of leaking roofs,
- provision of adequate light and ventilation,

- replacement of straw, palm leaf thatch and other vegetation in construction with more permanent materials less likely to harbour insects and vermin,
- use of smokeless methods of cooking,
- construction of cooking and food storage areas which can be maintained in a clean condition,
- separation of areas used to house animals, from areas of human habitation. (2)

These inputs have strong linkages with each other and need to be implemented in a coordinated manner if the objective is to be achieved. Often this is not the case, as is illustrated by the following examples:

- street standpipes and handpumps that do not have adequate provision for the drainage of surplus water and as a result muddy stagnant pools develop forming mosquito breeding areas.
- doctors, nurses and medicines are available but people have to return to live in the same insanitary conditions that contributed to their illness in the first place.
- medicines to cure malaria and filaria are available but there are no attempts to eradicate mosquitoes.

Integration of slum Communities

However, apart from dealing with the specific issue of health we should be aiming for a higher objective, the integration of the slum communities into the physical fabric and the economic and social networks of our cities. This process involves the externalisation of the linkages of the slum communities and the implementation of a critical

set of inputs that brings about the important psychological change of a slum dweller no longer feeling that he lives in a slum and equally importantly, for other city officials and families no longer saying "that is a slum family". In order for this process to take place there needs to be a critical minimum level of inputs that bring the slum community to a point of take off.

Although the initial investment may be higher than that under the Government of India and World Bank funded programmes it is argued that this approach can compare favourably when real costs are taken into account, which include the initial cost of asset plus its cost in use over its life, and the direct and indirect economic returns from a community that is healthier, better educated and able to earn higher incomes. Moreover, this process is likely to bring about a permanent state of change for future generations.

Hyderabad and Visakhapatnam Experiences

The integrated package of slum improvement, health, housing and community development programmes that are currently being implemented in Hyderabad and Visakhapatnam are an attempt to achieve the objective of integration of the slum communities. The programme inputs are given in detail in the Appendix.

Both the programmes in Hyderabad and Visakhapatnam are being organised through Urban Community Development Departments within the Municipal Corporations. The community development staff in these Departments contact the slum communities and help them identify their needs and priorities as well as

generating awareness in areas such as health and education. The programme is therefore a shopping list from which the community can choose rather than a fixed programme to be imposed on the slum communities.

Costs vary considerably but per capita investment in Hyderabad is about Rs. 770 and in Vizag about Rs. 810. The latter includes improvements to nullahs that pass through the slums. Both figures exclude the cost of HUDCO housing loans.

Although the amount invested is over two and a half times the Government of India norms for slum improvement programmes, actual experience in Hyderabad has shown that an investment of this magnitude does bring the slum communities to a point of self-sustaining "take offs", and the critical change in attitude from that of "slum dwellers" to "citizens".

Detailed research is still required to identify the essential components in the package of inputs that are likely to accelerate this process. However, studies have shown that the following inputs have made a significant impact.

The programme allows for upto 80% of the families to have individual toilet connections. Not only are most families willing and able to make a financial contribution, but the fact of having their own toilet has brought about a dramatic improvement in hygiene conditions within the house and in the surrounding environment. The provision of public conveniences, under the programmes described earlier, only perpetuates a feeling among the slum dwellers, that this programme is only for slum dwellers, and that they are being treated as second class citizens.

The provision of pre-schools and balwadi teachers provides an contact point with the mothers and children and is an important link in the implementation of many of the health programmes. Of equal importance is the fact that when children attend the pre-schools parents being to realise the importance of education and lose their inhibitions about sending their children to the city's primary and secondary schools. And this is a major factor in the integration process.

Many of the communities have agreed on a rehousing programme, and have voluntarily demolished their huts shared the land equally and have built new pucca structures on the same site. By going through this process, the community's confidence in its own ability to solve its own problem was increased enormously.

Emphasis has been placed on the role of the woman as a stabilising influence in the family and in order to prevent the male members from entering into impulsive sales of the houses, they are registered in joint names and in some cases in the name of the woman alone.

Much of what has been achieved would not have been possible, without, a very strong community development programme which has ensured that the communities are participating in their programmes.

Although the initial cost of the investment has been higher than in other programmes, the costs in use and the cost of maintenance are considerably lower. Individual level services are maintained by the families themselves and inputs that are a genuine response to community priorities are likely to be looked after by that community.

The costs and benefits of this type of approach are difficult to quantify but examples include the following:

- a) An acceleration of the process of absorption of the slum dwellers into the city, converts them from a group who need and use services to people who can demand them.
- b) Improvements in living and environmental conditions stimulates the families to make their own efforts to make improvements in the areas of health, education and employment.
- c) The cost of these investments will be recovered by direct and indirect financial benefits to the city as well as to the concerned communities. There will, for example, be an increase in equity from the land and buildings owned by the community as well as in the land of other public and private owners in the surrounding areas.
- d) The programme encourages the families to realise their own, and their extended family members, unused assets and invest them in housing. These assets can be in the form of cash, jewellery, and other household items of value or even village land and property.
- e) When families feel that their needs and priorities are being responded to, they will often find ways of increasing their income, by more members working, starting home-based businesses or sub-letting part of their accommodation.
- f) There are potential benefits to the city in the form of property tax from the newly constructed houses, and the prospect of enhanced tax from the surrounding buildings whose

value has increased as the result of improvements in the slum area. There will be an increase in the taxes collected from these properties at the time of sale, such as stamp duty, transfer or wealth taxes.

- g) Increased family income will mean increased purchasing power and therefore indirect taxation will occur through items such as sales tax. The overall increase in income and involvement in preventive medicine programmes will in the long run, reduce pressure on social welfare services (4).

These are areas for further research as are the identification and quantification of indicators of absorption and integration of the slum communities into the city.

"The extent to which integration takes place is a function of the externalisation of social and economic linkages and the degree to which city level services penetrate into the slum areas.

Examples of the externalisation of social linkages can be the marriages of sons and daughters to non-slum families and slum children attending schools which are used by children who live in other areas of the city. The selling of goods and services to people outside the slum and the upgradation of educational levels and skills so that people from slum areas can obtain higher levels of jobs and incomes can be indicators of economic externalisation. All these contribute to the critical psychological change of no longer being a slum dweller.

Urban Housing Policy

Although these packages of inputs may bring about a substantial improve-

ment in the effectiveness of slum improvement programmes they do not deal with fundamental housing and development problems at city level. To deal with this we need to develop urban housing policies, within which slum improvement programmes may form an important component.

The basic issue is an increase in access to land and housing at prices people can afford and in locations that reflect their needs and priorities. Our housing policies tend to be programme, rather than people orientated. A policy containing house construction, sites and services and slum improvement programmes is a frequently found mixture, although there is rarely an attempt to develop policies out of an analysis of needs and resources. This approach leaves many groups in the city with little or no access to housing programmes. Street sleepers and those living in dilapidated inner city rental accommodation are two groups almost entirely excluded from existing programmes.

Lastly, housing cannot be seen in isolation. It is one component in a family's set of needs and priorities. Community development programmes which include health, educational, social and economic development components, as well as improved access to basic services are all essential.

To end with a quotation from a paper written in 1980 by Kirtee Shah and Bill Cousins:

"The present crisis in the housing sector is largely the crisis of inappropriate intervention. The major fault lies in ignoring peoples' skills, genius and resources. Therefore, policies, programmes and projects need to be reorientated to put people in the centre of the housing process" (5).

To some extent the programmes in Hyderabad and Visakhapatnam are moving towards a more appropriate intervention.

References.

1. Report prepared for M. M. D. A. workshop on "Evaluation of Slum Improvement Projects, Mimeo, Madras 1981.
2. Slingsby, M. A. "A Community Based Problem Solving Approach to Environmental Health and Housing". Paper prepared for workshop on "Environmental Health and Housing in Rural and Urban Development", organised by University of Madras for WHO, SEARO, 1986.
3. Project reports for Hyderabad Slum Improvement Project Phase III. Municipal Corporation of Hyderabad, 1987, Mimeo.
4. Slingsby, M. A. "Community Development Support Programmes for Housing Projects ... A Problem Solving Approach", Habitat International, Vol. 10, No. 3, pp. 65-71.
5. Shah, Kirtee, and Cousins, W. J. "Housing and Development" in Shelter, Vol. IV No. 1, Summer 1981, New Delhi.

APPENDIX

Programme inputs in Hyderabad and Visakhapatnam (3)

Physical improvements:

- Dust proof black topped roads where the width is over 4 metres.
- Paving stones to all other lanes and footpaths.
- Provision of storm water drains.
- Sewer lines to allow for 80% individual house toilet connections and for one public toilet for every 20 persons for the remainder.
- Sewer lines include laying of branch lines and inspection chambers for individual connections.
- 30% of the cost of constructing a toilet platform and connecting to an inspection chamber or leach pit, the remaining 70% coming from other Government of India programmes and beneficiary contribution.
- Construction of community septic tank where mains connection is not possible.
- Provision of multipurpose community hall in each slum.
- Street lights for every 35 m of road length plus one light at each corner.
- Water supply lines to provide 25% individual connections and one street standpipe for every 30 families.
- Refuse collection bins at the rate of one per 100 families.

Health programmes:

- Immunisation of children including giving polio, measles, tetanus, BCG and diphtheria vaccinations.

- Prevention of blindness through vitamin A prophylaxis.
- Iron and folic acid treatment to children and mothers.
- Mass deworming of children.
- Growth monitoring.
- Health education through family and group contacts and formation of slum health committees.
- Training of slum health workers in first aid, midwifery and food preparation.
- Training of educated women as auxiliary nurses and midwives.
- Supply of health kits for delivery and first aid.
- Family planning education and advice.
- Sanitation drives.
- Water sample testing.

Literacy and education:

- Adult literacy programmes for those in the 15-35 age groups with the emphasis on functional literacy for women.
- Pre-schools in each slum with trained balwadi teachers and teaching equipment as part of the programme.
- Coaching classes for school going children and for young school dropouts.

Economic support programmes:

- Craft training for women and youth based on the community halls in the slums.

- Revolving loan fund to assist in starting small businesses.
- Sponsorship for training at existing voluntary and government training centres.

include the development of local initiatives and skills, community leadership and self-reliance.

Housing :

Social development programmes :

- Establishment of reading rooms.
- Support for local social activities and study tours to other areas.

- Loans arranged through HUDCO to enable the slum communities to get together and rebuild their houses out of permanent materials on the same site.

Community development activities :

- The programme is supported by a team of project officers and community organisers whose functions

Security of tenure

- Pattas are issued for house plots under the State Government programmes.

Summary of Discussion

Prof. Michael A. Slingsby spoke on policy options for slum improvement. The paper stressed the need for an integrated package dealing with health, housing and community development programmes; citing and sharing the experiences along these lines at Visakhapatnam and Hyderabad and Concluded with a discussion of specific issues that may affect and influence policy as well as further research.

The paper highlighted the core of the problem placing housing as the nucleus and pointed out the general attitude of the authorities in implementing the policies. The objectives of the policy should be problem-solving rather than an engineering exercise of implementing the programme for its own sake.

The paper discussed in detail about the issues relating to internal linkages within the system as well as the external linkages of the slum communities into the physical fabric and the economic and social network of our cities. To meet this end a critical minimum level of inputs was mentioned to bring the slum communities to the point of take-off; an appropriate intervention by the authorities would be apt in this regard.

In the discussion, one of the participants inquired about the literature and the author pointed out the need for research in the future.

Another participant pointed out the unfavourable industrial and political atmosphere in the urban sides and the chair person also accepted such existence remarking "the tale of two cities" in any given urban conglomerate.

The discussion touched the policy of issuing pattas to the slum dwellers, and thereby making them conscious and responsive and this policy option was reinforced by the positive experiences in these lines.

Installing private soakpit systems with 80% subsidy was also cited as an alternative to the sanitation problem.

While winding up the seminar the Chair person welcomed the ideas of issuing joint pattas to both spouses and constructing private toilets for each family admitting the short-supply of water in such provisions for each family.

The seminar was chaired by L. M. Menezes, I. A. S. Special Officer, Corporation of Madras.

S. Thirumalai Velayutham

Some Comments on 1988-89 Union Budget*

Background

The budget presented to Parliament in February 1988 is really aimed at raising resources to finance governmental activities approved by Parliament for 1988-89. That seems a simple and straight forward task, which has involved the government asking Parliament for authority to appropriate for its activities some 22-23 per cent of the National Income, which is also the percentage obtaining for each of the four years of the Seventh Plan. But in doing this, it also does incidentally many other things, which the Finance Minister took about two hours to talk about to Parliament when introducing the budget.

These other matters were related to some seven serious issues concerning the economy, which the budget, in the process of raising the resources needed for government's disbursement, had to address itself to. The first is the declining growth rate of the economy, which, according to CSO, in the first 3 years of the Seventh Plan averages an annual 3.3 to 3.6 per cent instead

of the targeted 5 per cent. The second which is also the main reason for this poor performance is the low and declining record of agricultural growth or non growth, which was 1.4 per cent in 1985-86, 0.2 per cent in 1986-87 and -7 to -10 in 1987-88 (which is attributed to the drought), instead of the annual target of 4 per cent. Third and related to the above two is the unbearable inflationary pressure on the economy (also attributed to the drought), which in the first 10 months of 1987-88 was 9.8 per cent on top of the 72 per cent price rise recorded since 1979-80 (with which year the government keeps comparing this year's price rise). Fourth, and back and in front of the price rise is the galloping and cumulatively growing non Plan expenditure, which in the first 3 years of the VII Plan amounted to Rs. 1,08,337 crores. Fifth, the industrial record, which is precariously perched at a high level of 10-11 per cent during the current year, is unrelated to any of the above, but which will have to cope with the after effects of the drought in 1988-89.

Sixth, there is the gloomy foreign trade and balance of payments profile on which the record industrial growth rate seems to have had little effect. Finally there are the large numbers living in poverty and those classed as the weaker sections of society and the growing inequality in the society.

Three special points

Against this backdrop, the Budget for 1988-89, through some kind of statistical and other adjustments (sleight of hand) makes three rather obvert and significant political points.

The first is that the 1987-88 deficit of Rs. 6080 crores in the revised budget is not too far off the deficit estimate of Rs. 5688 crores presented by the Prime Minister who was the Finance Minister when that budget was presented. This has relieved a lot of people, who, looking at RBI credit to government during the year, expected at least a doubling of the original budget deficit. What sort of statistical rearrangements were made to arrive at the revised deficit will be known only in time. It is known that to bring about this result market borrowing in 1987-88 was increased from the budgeted Rs. 6300.09 crores to Rs. 7000.09 crores, and special deposits increased from Rs. 2820 crores to Rs. 3875 crores. Similarly the postponing of some expenditures to the future, the use of administered prices increases to reduce budgetary support to public sector enterprises, including the incremental issue of public sector bonds to finance that activities, and the realism or otherwise of the increase of some Rs. 3229 crores from corporate taxation and non taxes assumed in the revised budget — all this will be known in time.

The second point made by the budget is, for the first time in our budgeting history, to show the revised defence expenditure in 1987-88 at Rs. 12,000 crores to be below the budgeted Rs. 12572 crores, and to allow a less than 8 per cent increase in defence expenditures for 1988-89 at Rs. 13000 crores, when the price rise in the first 10 months of 1987-88 is already 9.8 per cent. This means in real terms the defence expenditures in 1988-89 will be lower than that of 1987-88. When fuller details are made available — if they are made available, — how these reductions have been effected, particularly with the monthly Sri Lanka defence drain, can be known. As no savings could have been made on manpower, where with increased emoluments, expenditures must have risen, the status of equipment purchases, modernisation programmes and above all imports of armaments need to be looked at. I have held that a cost effective review of the defence outlay item by item would lead to a Rs. 2000—3000 crores savings.

The third political point is in the Finance Minister's statement, introducing the budget: "I do not propose any change in the rate structure in personnel and corporate taxes". The wording was carefully restricted to the rate structure, but it was hailed by income and corporate tax payers as meaning *no increase in their taxes*. This was not so, because a) a surcharge has been imposed on income and corporate taxes as a normal revenue raising measure, and b) the estate duty has been reintroduced in the form of a tax on the transfer of wealth through inheritance at rates higher than the previous estate duty rates. In addition a 5 per cent surcharge has been imposed on basic

* An article by Dr. Malcolm S. Adiseshiah for Chartered Secretary, Institute of Company Secretaries of India, New Delhi, March 1988.

excise duty. I personally have advocated these tax increases (and two others, the raising of income tax slab rates and the levy of agricultural taxation which were not accepted) see Economic Times, February 11 p 5. But I would not call these proposals that have been made as constituting no change in the tax rates.

Positive aspects

There are atleast six positive aspects to the Budget. First, the budget is a sound short term instrument for dealing with the two urgencies facing the economy, which are repeatedly reiterated by the government in presenting the budget, namely the effects of the drought, and its aftermath in bringing about recessionary conditions. The main means of combating the drought and the possible recession is the packet of 8 measures proposed to revive agriculture and bring about foodgrains production of 166 million tonnes in 1987-88, to be followed by 175 million tonnes in 1988-89. The 40 per cent increase in agriculture is only in irrigation, the agricultural outlay itself actually declining from Rs. 1,157 crores in 1987-88 to Rs. 1078 crores in 1988-89, the lower interest rates on crop loans, the increased flow of farm credit, the cut in fertiliser prices, the reduction in pesticide prices, the increased fertiliser and food subsidies, the National Agricultural Credit Relief Fund, lower duties on pumpset motors, and on agriculture machinery. These measures tied in with the Action Plan for agriculture will both revive agriculture and by increasing farm incomes will counter the fall in demand for manufactures which would otherwise have taken place.

Second, the budget provides for 16.6 per cent increase in the 1988-89 Union

Plan (11.7 per cent increase on the basis of the revised budget) which ensures an increase in real terms of the Plan outlay over the 1987-88 outlay, and provides for expansion in the key infrastructural sectors of energy, transport and communication.

Third, there are some four main provisions to provide some relief to the poor and people belonging to the backward communities, through the National Scheduled Caste and Scheduled Tribes Finance and Development Corporation, the Village Abadi Environmental Improvement Scheme through HUDCO, the Social Security Fund through LIC and the fire insurance scheme through GIC, the Small Industries Development Bank and the expansion of NREP, RLEGP, Desert Development Programme, IRDP, accelerated water supply and the Minimum Needs Programme generally.

Fourth, the budget makes some attempts to promote savings and to an even lesser extent investment through 8 provisions: namely tax exemption of an additional Rs. 3000 from dividend income, the increased concession under 80 CCA upto Rs. 39,000, the 50 per cent relief of investment in equity shares, the improvement in returns of Indira Vikas Patra, Rahat Patra and new bonds and deposit certificates, increased standard deduction for salary earners, full-tax exemption for export profits and tax exemption of subsidies to rubber, coffee and cardamom plantations etc.

Fifth, the housing sector is being activated through the Rs. 100 crore contribution to the National Housing Bank, the Housing Finance from Land Development Banks, the HUDCO facility earlier referred to. (Incidentally the creation of a number of these new agencies in every budget is like the

laying of foundation stones on the eve of elections, it produces no result and the projects just die off in time).

Sixth, and in quantum terms rather small, is the first attempt ever made in a budget to protect our fast deteriorating and damaged environment through reduction of excise duties on aluminium and steel doors, windows, their frames, and corrugated iron sheets with a view to diverting the use of wood for this purpose, which is contributing to the alarming rate of deforestation. What is proposed is a feeble effort, but it is significant because it recognises the protection of the environment as important.

Negative Effects

The budget has an equal number of weak features.

First, and most seriously, as the budget had to concentrate on the short term issues of the drought and recession, there is no medium term strategy of development built into it. The budget is not savings and investment oriented, and makes no effort to mobilise resources through direct taxes, or to widen the tax net. For instance, while income tax payers number 2 million (with the higher exemption limit there will be some erosion in this number), the number of car owners is 11 million, TV set owners 7 million etc. The budget has now reached a stage, when since the start of the Seventh Plan, the Annual Plan is being financed through a) the increased revenue from the rise in administered prices, b) deficit financing, and c) market borrowings. This is not the manner to move towards a budget with a development strategy and a Plan which is investment oriented.

Second, the high level of the budgeted deficit of Rs. 7484 crores for 1987-88 over Rs. 6080 crores for 1988-89 will send prices shooting up. To the above Union deficit in 1987-88 should be added the Rs. 1545.3 crores, deficits of the states, as set forth in RBI's latest bulletin. These deficits being in the form of RBI credit to government, involves the creation of Reserve Money, which is on top of the Rs. 28,879 crores of Reserve Money already created upto September 1987, and which have a multiplying effect on M_1 and M_2 . Deficit budgets have been justified in terms of its effects in increasing unused capital, but a study of the data shows that there is no relation between the annual deficits and GDP growth, there is no use of excess capacity or additional capital formation, and that larger money creations leads directly to excessive inflation.

Third, the budget makes no attempt to restrain non Plan expenditure referred to earlier as one of the backdrop problems, which rises from Rs. 39,265 in the 1987-88 budget estimates to Rs. 41,236 in the revised estimates onto Rs. 47,896 crores in 1988-89. This continuing increase in Non Plan expenditure means that (1) once more non Plan expenditure out runs revenue receipts, which are budgeted in 1988-89 at Rs. 42,798 crores, resulting in capital receipts (market borrowings) being used to close the gap, (we are borrowing to pay for our consumption expenses), and more seriously (2) the resources for the Plan and non Plan development activities are squeezed and face a resource crunch in 1988-89 again. The non plan non development expenditure can be reduced. A cost effective review of the defence outlay can save, as noted earlier, Rs. 2000 to

Rs. 3000 crores, without any decrease in our defence efficiency or preparedness. Subsidies can be reduced by Rs. 1500 crores on fertilisers, and Rs. 500 crores as exports, (the increased fertiliser subsidy alongside of the food subsidy is like increasingly burning the foodgrains candle at both ends). Interest rate payments which are already more than double the market borrowing for 1988-89, are signalling the possibility of our entering the debt trap. This should make us slow down market borrowing which has well exceeded the Seventh Plan provisions. Administrative costs in the form of staff salaries on vacant posts, CRPF and black cat command units can be cut down.

Fourth the budget which proudly proclaims that with the 1988-89 Annual Plan provisions, 86 per cent of the Union Plan outlay for the Seventh Plan will have been met, raises the question of the return on this sum of Rs. 70,000 crores disbursed or to be disbursed in 4 years. It means Plan outlays average an annual increase of 11 per cent, which has yielded a growth of 3.3 to 3.6 per cent, as noted earlier. Where has this money gone? The budget embodies an inefficient and wasteful use of the country's scarce capital.

Finally, to put together a number of disparate items, the budget does not embody an industrial development policy. It has not helped develop the capital market, the assistance given to the cement industry is small and will produce no result, the package to help the textile industry continues the imbalance between the three constituent sectors, particularly the powerloom sector, (the government directive that excise concessions must be passed on to the consumers is without any teeth, as in the case of

PFFY prices which were raised by Rs. 6-7 per kg just before the budget, in which case the question is what price is being lowered — the pre or past price hike level), the concessions given to the garments, leather, gems and jewellery industries are not likely to result in self generating development. The tax concessions for the capital goods industry is the only positive element but even that is a recovery measure — recovery from the losses suffered by the industry from the wrong policy pursued during the first 2 years of the Seventh Plan.

On balance of payments, the scheme to protect exports from the effects of the fluctuations in international exchange rates is necessary, but the budget has not given effect to the clear and unequivocal demand set forth in the Economic Survey to cut back on imports, as the main means of correcting the deficit trade balance.

While ensuring that some essential commodities are exempted from the excise hike, the budget makes no attempt to use the tax instrument for redistributive purposes, or push land reform along. It makes no attempt to control the growing "black incomes and wealth" of the country documented for the government by the NIPFP report, or control the flight of resources by anti-FERA entrepreneurs documented just for one country by the IMF staff study.

Contrary to the promise made in the Long Term Fiscal Policy and the Finance Minister's own statement, the 1988-89 budget increases dependence on indirect taxes. Of the net tax revenues of Rs. 3489 crores is contributed to the Union budget in 1988-89, Rs. 3012 crores from indirect taxes and only Rs. 477 crores from direct taxes.

Book Review

Indian Agriculture: A Policy Perspective. B. M. Bhatia
Sage Publications, New Delhi, Price Rs. 140/-

Agricultural Development is the base for Indian National Development, in that, on it depends the well being of its people, particularly in attaining the objective of reducing the number and percentage of people living in poverty; the possibilities of providing employment opportunities for the rapidly increasing number of new entrants into the labour force as well as reducing the under employment and increasing the gainful employment of those in employment; and, providing the inputs as well as a widening and expanding market for manufacturing industry and its products. This truth is set forth clearly among the objectives of the Five Year Plans, particularly since the shock administered to the economy during the drought years at the end of the Third Plan, and the Plan holiday that followed, and again more recently in the last two Plan documents — those of the Sixth and Seventh Five Year Plans. But these intentions have not been translated into a forward moving agricultural programme because the Planning model

that was followed was inappropriate; the macro policy objectives were not translated into micro realisable programmes; and even within the inappropriate agricultural sectoral plans, there were basic contradictions which made impossible the realisation of its various targets. These are the basic propositions set forth in the publication under review.

The treatise starts with setting forth an account of the uneven distribution in the growth of foodgrain yields as between the five zones of the country, which is paralleled by imbalance in the cropping pattern, and the uneven concentration of agricultural investments that have neglected about three fourths of the farm lands of the country. There follows an interesting historical account of the introduction of the Green Revolution and the breakthrough obtained by linking the agricultural prices policy with the technical facets of the Revolution, which is not generally realised or recognised. The petering out

of the 'Green Revolution' by the late seventies and the resulting increase in the cost of inputs and the decrease of the outputs followed, which is really traced over the period 1970-71 to 1983-84, with the rise in fertiliser prices playing a major causal role.

The uneven and fluctuating nature of agricultural growth since the start of planning is analysed under three broad heads. First, there is the problem of uneven growth of crop yields and distorted cropping pattern. A revealing Table 3.1 on the growth rates of area, production and yield of principal crops vividly highlights both — the increase in area and yield under the two main cereals, rice and wheat, and the decline of coarse cereals which lost their satisfactory position after the mid sixties. Second, the interstate disparities in that growth of foodgrain production and consequent regional imbalances in the growth rate are highlighted (tables 3.2 and tables 3.3) and related to irrigation facilities in the area (table 3.4), resulting in widely varying intensity of cropping (table 3.5). Third, the kind of agricultural growth is, on the one hand, held to have reduced poverty a la NSS 32nd round and 38th round data, and, being, on the other hand, concentrated in a small sector of the country and just 2 foodgrain crops, is shown as not having solved 'the problem of hunger amidst plenty'.

There follows a critique of the country's development plans based on a capital-intensive-industry-development-oriented strategy, which among other effects has not enabled employment increase to keep pace with population increase, unlike the Green Revolution experience in Punjab, Haryana and West UP where crop yields, employment and wage rates all increased parallelly.

Hence a strong plea is made for basing development on increased and improved agriculture, for which land reforms may be desirable but not necessary: for going in for mechanisation as it is land saving rather than labour saving: for use of subsidies — both on fertilisers and food — which should be directed only to small and marginal farmers; and for state intervention in both product and factor market prices, which will turn the terms of trade in favour of the farming community, instead of against it, as at present (see table 4.2). In all these clear guidelines, the Seventh Plan has failed, both the farmer and the community, and the preliminary drafts of the Planning Commission on the Eighth Plan point in the same direction.

Against this analysis, a strategy for agricultural development in the Eighth and future Plans is set forth comprising: a) replacing the present 'bimodal' pattern of agricultural development (a flourishing northwest with a barren rest of India dry, land area) by a 'unimodal' pattern where all lands — wet and dry, all farmers large and particularly small, will have access to and use all tools of modernisation resulting in increased productivity. The five implications of this approach are spelt out — increased R&D on dry land farming, adequate farm kits for small and marginal farmers, merging this programme with IRDP, all subsidies to be limited to small and marginal farmers, a food policy which will lower costs and prices uniformly, and an equitable pricing policy: b) decentralised planning which will make the block and the district the deciding area, with the central plan being an indicative plan: (There follows a historical critique in light of these two principles); c) the adoption of new scientific and technological break

throughs in agriculture, comprising genetic engineering, biofertilisers alongside of soil and water management and scientific farm management. It is heartening and a relief to see this publication on agricultural renovation in India ending with a much neglected area, namely the extent of environmental and ecological damage done so far, and guidelines for future optimal resource use through a 15 point land use policy.

In this sound and scholarly treatise, there are issues which are open to further reflection and debate. One is the distributional and 'trickle down' effects of the Green Revolution. As against Ahluwalia quoted in the publication, there are Bhabtosh Datta, Kurien, K.N. Raj etc whose studies show that the Green Revolution has led to increase in the number and assets of large farmers, while increasing the number and percentage of small farmers and landless labourers. Another issue is the effect of agricultural growth on the reduction of poverty. Against the NSS data (32nd and 38th rounds) quoted in the publication, are a whole array of methodological problems pointed out by A. Vaidyanathan, Bhalla and Chaddha, K.C. Chopra, S. Subramanian (and myself) which throw doubts on the simplistic relation on poverty reduction and agriculture growth. Even here, the Planning Commission technical note on the Seventh Plan attributes the reduction in the number of poor which took place

in the good agricultural years of 1977 and 1983 to the extent of 55 per cent only to agricultural growth. There are also questions of the somewhat biased interpretations of the so called Mahalanobis model, and the attribution of Plan failures and distortions to industrialisation positions which are not empirically proved. The discussion on land reform and the market role and organisation on agricultural farm policy is somewhat scanty and misleading. The absence of reference to animal husbandry and inland fishery in a work on the perspectives of Indian agriculture is somewhat surprising.

The publication is, however, a carefully compiled formulation of a particular view of Indian agriculture. Its statistical data is invaluable. Its closing sections on the new scientific breakthroughs awaiting application in Indian agriculture, and the reference to the ecological implications of agricultural development which should be built into that development are important innovative approaches. The agricultural economic community owes the author a debt of gratitude for his highlighting the major issues awaiting the sector and the country in future plans.

(Malcolm S. Adiseshiah)

March 12, 1988.

Eighteenth Census of Social Science Research in Southern States

1988

Introduction

The Eighteenth Census of social Science Research appears to have recovered, to some extent atleast, from the big dip that the Seventeenth Census showed in terms of the total number of entries. There are 313 entries this year compared with last year's 271. But certainly it does not represent a full coverage of social science research in the four Southern States. It may be recalled that the Sixteenth Census had 536 entries, the Fifteenth 408 entries and the Fourteenth 422 entries. Table 1 which tabulates the entries according to states and institutions as well as disciplines will show that the coverage is far from exhaustive. For instance, only 4 institutions have responded from Andhra Pradesh and 2 from Kerala. This is rather disappointing because in view of last year's poor response, special efforts were made this year to canvas

information. Letters were sent out to as many as 235 institutions earlier than usual. In addition to writing to Heads of Departments / Institutions, communications were also addressed to chairpersons of Board of Studies. We would welcome suggestions from use of the Census on how its coverage can be made more comprehensive.

Table 1, as already mentioned, gives the list of institutions that have participated in the Census and the general classification of entries according to subjects. In all 25 institutions (Departments) responded to the request for information. Of the total 313 entries, Economics leads the list with 163. The second place is taken by Education, which has 38 entries and the third place by Political Science & Public Administration with 35 entries. The figures

for the remaining subjects are History 20, Sociology 15, Anthropology 13, Commerce 11, Demography 8, Social Work 5, Agriculture 3 and Psychology 2.

The rows in Table 1 give information about the institutions arranged according to states. The State totals are also indicated. As usual, Tamil Nadu takes the lead with 137 entries, the second place goes to Karnataka with 85 entries, and the third to Andhra with 61 entries. In all the States, Economics takes the lead. In Andhra Pradesh, Political Science is a close second. From Kerala, information has been received only on Economics, Education and Political Science.

Table 2 gives a more detailed classification of the Census according to the purpose for which research is being done. Out of the 313 entries, 132 lead to Ph.D. theses and 105 to M.Phil dissertations, the rest being research not linked to degrees.

Presentation of Census

Part I of the census which reports on research projects is organised as follows:

The classification is first, subject-wise, second, institution-wise (University, institute and college), third, degree-wise (M.Phil, Ph.D. and projects not leading to any degree) and fourth, sub-area-wise (alphabetically) and within each sub-area the order chronological. The subject classification and the institutional listing is alphabetically arranged beginning with Anthropology.

Every entry first carries the title of the project. This is followed by the sub-area to which the research project belongs. It should be noted that the

sub-area is as given by the respondents. Where this or any other information is absent from any entry, it may be understood that the same was not furnished by the respondent. The sub-area is followed by a brief account of the objective and methodology of the project. Then follow the degree to which the project leads (Gen standing for 'General' is indicated if the project does not lead to a degree), the date of commencement of the project and date of termination, in that order. Finally, the names of the researcher and supervisor respectively are furnished. The abbreviation '(Ind)' appearing against the name of the researcher (s) indicates that the project has been undertaken independently by the researcher (s).

In the case of projects which have been reported either in the last census or in an earlier one, two points should be noted (1) The objectives and methodology of projects are not repeated if they have already been reported in sufficient detail. However all other information is furnished. (2) In addition to other details, the objectives and methodology are included in cases where: (i) this information was missing in the earlier report, (ii) the presentation in the current report appeared to be more clear or detailed, and (iii) any change was noticed in the Objectives and or Methodology.

The following abbreviations have been used in the presentation :

- A : Sub-area
- O : Objectives
- M : Methodology
- R : Name of the researcher
- S : Name of the supervisor

Gen : General

Ind : Independent Research

In part II of the Census, the areas of specialisation of different centres is listed on the basis of information supplied by the heads of concerned centers (departments or institutes as the case may be). It is hoped that the information given in part II will help

the researchers to find out where research work of their interest is currently going on. The appendix provides the addresses of the universities, institutes and colleges which have responded to the census.

Comments on the census from users and suggestions for improving the presentations of the reports will be most welcome and may be sent to the Director of the Institute

TABLE: 1 Eighteenth Census of Social Science Research in Southern Universities: General Classification

Sl. No. State University/Institution	Agriculture	Anthropology	Commerce and Business Administration	Demography	Economics	Education	History	Political Science & Public Administration	Psychology	Social Work	Sociology	Total
I. ANDHRA PRADESH												
1. Andhra University	...	...	...	...	5	...	...	5	...	...	2	12
2. Kakatiya University	...	...	9	...	...	...	...	11	...	...	...	20
3. Nagarjun University	...	...	...	...	...	...	...	6	...	...	...	6
4. Sri Venkateswara University	...	...	...	5	18	...	...	...	...	...	...	23
Andhra Pradesh Total:	...	...	9	5	23	...	...	22	...	...	2	61
II. KARNATAKA												
1. Bangalore University	...	...	...	...	...	...	...	...	2	...	...	2
2. Gulbarga University	...	...	...	...	5	...	...	...	...	...	...	5
3. Karnatak University	...	8	...	...	...	7	...	4	...	...	...	19
4. Mangalore University	...	...	...	...	...	...	3	...	...	...	...	3
5. Mysore University	...	...	...	...	...	...	11	...	...	...	...	11
6. ISEC, Bangalore	3	1	...	3	29	5	...	3	...	...	1	45
Karnataka Total:	3	9	...	3	34	12	14	7	2	...	1	85
III. KERALA												
1. Cochin University	...	...	...	...	8	...	...	...	...	...	...	8
2. University of Kerala	...	...	...	...	16	5	...	1	...	...	...	22
Kerala Total:	...	...	...	...	24	5	...	1	...	...	...	30
IV. TAMIL NADU												
1. Annamalai University	...	...	...	...	24	3	...	...	...	...	...	27
2. Bharathidasan University	...	...	...	...	11	...	...	...	...	...	...	11
3. Gandhigram Rural University	...	...	...	...	...	...	...	...	...	2	...	2
4. Madurai Kamaraj University	...	...	1	...	4	10	...	5	...	...	10	30
5. Mother Theresa University	...	...	...	...	5	6	6	...	...	...	2	19
6. University of Madras	...	...	...	...	5	2	...	...	...	...	...	7
7. Centre for Research on New International Economic Order	...	...	...	...	5	...	...	...	...	...	...	5
8. Madras Institute of Development Studies	...	...	...	...	8	...	...	...	...	...	...	8
9. Tribal Research Centre	...	4	...	...	...	...	...	...	...	...	...	4
10. Institute for Financial Management & Research	...	...	1	...	1	...	...	...	...	...	...	2
11. Madras School of Social Work	...	...	...	...	...	...	...	...	...	3	...	3
12. Madras Christian College, Madras	...	...	...	...	10	...	...	...	...	...	...	10
13. Stella Maris College, Madras	...	...	...	...	9	...	...	...	...	...	...	9
Tamil Nadu Total:	...	4	2	...	82	21	6	5	...	5	12	137
Grand Total:	3	13	11	8	163	38	20	35	2	5	15	313

Part 1. Research Projects

AGRICULTURE

Institute for Social and Economic
Change, Bangalore

1. IMPACT STUDY OF KRS (Krishnaraja
Sugar irrigation project)

A : Irrigation

O : To assess the impact of irriga-
tion on the resource base in
the region; analyse the changes
that have occurred in the occu-
pational pattern, population
characteristics and HRD para-
meters & examine the Farm
economy.

M : Quantitative assessment of
impact.

Gen : April 1984 : June 1987

R : R. S. Deshpande

S : (Ind.)

2. Economics of Sericulture in Com-
mand Area

A : Crop economy

O : To study economics of seri-
culture (employment, cost,
income, incremental income and
living conditions) in command
area in traditional mulberry cul-
tivating zone & analyse the
specific problems of irrigated
sericulture.

M : Mainly quantitative of the impact
assessment type.

Gen : July 1986 : Dec. 1987

R : R. S. Deshpande

S : (Ind.)

3. Medium Term Perspectives for
Karnataka Agriculture

A : Forecasting Crop production

O : To obtain reliable estimates of
projections of crop output &
analyse and assess the problems
that Karnataka agriculture would
face in the next two decades.

M : Quantitative.

Gen : May 1987 : October 1987

R : R. S. Deshpande

S : (Ind.)

ANTHROPOLOGY

Karnatak University

4. Social Anthropological study of a
Nomadic Artisan Tribal Community
in a Metropolitan setting.

A : Social Anthropology

O : To study the possible changes
between place in their rural life.

M : Survey method to select bands
and later interim and care study
method used.

Ph.D. December 1986 : Ongoing

R : Anil Mahajan

S : K. G. Gurumurthy

5. The Karga — the Vanishing Tribe of
South Kanara Dist-A study of Dermo-
graphic & Socio-cultural change.

TABLE : 2

Eighteenth Census of Social Science Research in Southern Universities :
Subject Classification.

Sl. No.	Area	Page No.	Ph.D.	M.Phil	General	Total
1—3	Agriculture	S. 7	-	-	3	3
4—16	Anthropology	S. 7	9	-	4	13
17—27	Commerce & Business Administration	S. 10	7	-	4	11
28—35	Demography	S. 12	4	1	3	8
36—205	Economics	S. 14	67	74	22	163
206—236	Education	S. 55	12	8	18	38
237—256	History	S. 63	13	1	6	20
257—291	Political Science & Public Administration	S. 67	16	9	10	35
292—293	Psychology	S. 75	1	1	-	2
294—298	Social work	S. 76	1	1	3	5
299—313	Sociology	S. 77	2	10	3	15
	Total		132	105	76	313

- A : Social-Cultural Anthropology
O : —
M : —
Ph.D. December 1980 : Ongoing
R : K. C. Shetty
S : B. G. Halbar
6. Anthropology study of Motivational Factors for acceptance and Adoption of Small Family in Rural Setting.
A : Social-cultural Anthropology.
O : —
M : —
Ph.D. October 1980 : Ongoing
R : V. M. Kaliwad
S : B. G. Halbar
7. Rural-urban Migration and socio-cultural change among the Brahmins of Dharwad.
A : Social-cultural Anthropology
O : —
M : —
Ph.D. Aug. 1982 : Ongoing
R : P. S. Adi
S : B. G. Halbar.
8. Socio-Economic study of the weavers in Hubli
A : Social-cultural Anthropology
O : —
M : —
Ph.D. July 1984 : Ongoing
- R : Surekha Haldipur
S : Prabha Mahale
9. Socio-Economic change among the Ex-untouchables of Mysore.
A : Socio-cultural Methodology.
O : —
M : —
Ph.D. July 1984 : Ongoing
R : N. Ningaiah
S : Prabha Mahale
10. Idiga of Chittoor District : A Study in change and continuity.
A : Social-Anthropology
O : To read the changes taken place among the Idiga, a caste of Andhra Pradesh.
M : Questionnaire & interview technique used
Ph.D. November 1985 : Ongoing
R : K. Vishwanath Reddy
S : K. G. Gurumurthy.
11. Hanbars of South India — A study
A : Social Anthropology
O : To read this change and the adjustments made by the group in this direction.
M : Ethnological — case study method
Ph.D. August 1986 : Ongoing
R : Aruna Hallikeri
S : K. G. Gurumurthy.

**Tribal Research Centre,
Udagamandalam**

12. A Study of Language use and attitude among Nilgiri tribes.
A : Sociolinguistics.
O : To know the language use in mass media; in formal and informal domains and explore the multilingualism among the tribal groups.
M : Covered groups 10% of the total tribal population of Nilgiri district. 2036 samples collected.
Gen : March 1986 : Dec. 1987
R : R. Perialwar
S : (Ind.)
13. A study of cooperative movement among the tribals in Jawadhi hills of North - Arcot district in Tamil Nadu.
A : Cooperation among the tribals.
O : To study the prevailing co-operative spirit in the various social institutions of the tribal communities, their socio economic development and the structure and functioning of the LAMP societies that are saving the tribal people.
M : Participant observation, schedules etc.,
Gen : Aug. 1986 : Ongoing
R : Jakka Parthasarathy
S : D. V. Raghava Rao
14. Poverty alleviation programmes — An indepth study at Kalrayan Hills of South Arcot District.

A : Tribal Development

- O : To study the components of poverty alleviation programmes; assess the impact of various programmes & evaluate the suitability of the programmes.
M : Covers 10 percent of the beneficiaries and 100 non-beneficiaries spread over Kalrayan hills of South Arcot District.
Gen : Feb. 1987 : Feb. 1988
R : K. Baskaradoss
S : (Ind.)
15. Land alienation among tribals of Tamilnadu.
A : Tribal Development
O : To examine the forms of land alienation and magnitude ; analyse the causes and examine the adequacy of laws and administrative machinery for preventing alienation.
M : Covered 4 revenue villages in Salem District, 3 each from North Arcot, South Arcot and Nilgiri districts. 1 each from Dharmapuri, Periyar and Coimbatore districts. Study covered 16 revenue villages consisting of 102 hamlets from 7 districts. Data from 2631 tribal households and 16 revenue villages.
Gen : April 1987 : August 1987
R : D. V. Raghava Rao and K. Baskaradoss
S : (Ind.)

Institute for Social and Economic Change, Bangalore

16. Nayar Family and Kinship — A Study in change and continuity.

A : Kinship

O : To make a comprehensive ethnographic study of Nayar family and kinship as it existed in the past and the nature & direction of change occurring among them ; the structure and function of descent groups, kinship terminologies, behaviour & linkages & changing status of women would also be examined.

M : Secondary data was collected from books, articles, autobiographies, diaries, novels. Primary data by intensive field work using participant observation in a village in South Kerala for 14 months.

Ph.D : June 1984 : June 1988

R : Anita Kumari S.V.

S : D.V. Raghava Rao

COMMERCE AND BUSINESS ADMINISTRATION

Kakatiya University, Warangal

17. Training and Development of Executives in Andhra Pradesh State.

A : Personnel Management and Industrial Relations.

O : To review the personnel policies, training network available for executives in APSEB ; examine the effectiveness of training programme in developing the executives skills and evaluate the effectiveness of various executive development policies and practices in APSEB.

M : On the basis of secondary data, the training and development policies of APSEB in relation to executives, executives' pattern in APSEB, training facilities availed by executives in APSEB, were reviewed. On the basis of primary data collected from executives at various levels in APSEB, top management of APSEB, trainers and office-bearers of executives' associations, the effectiveness of various training and development of efforts were evaluated.

Ph.D : April 1981 : April 1987

R : T. Jogaiah

S : K. Rajeshwar Rao

18. Management of Rural credit for development.

A : Commercial Banks and Rural Development.

O : Credit schemes of the banks did not cover a large percentage of weaker sections in the sample villages. However, those who borrowed from banks reported some change in their economic position. To ascertain the coverage of weaker sections by banking schemes ; the impact of bank loans on the problems of socio economic position of borrowers.

M : Field survey through questionnaire.

Ph.D : June 1983 : Dec. 87

R : K. Krishna Reddy

S : Raviprakash Singaravelu.

19. Industrial Relations in State undertakings of Andhra Pradesh : A Case study of the Singaneri Company Limited

A : Labour-Management

O : To review the industrial relations in State undertakings of Andhra Pradesh with Special reference to Sringeri Collieries Company.

M : Primary Data : Opinion survey from 2 actors of IR's : Executive, worker and Trade Union leaders. Secondary Data : from various reports of DGMS, Dhanbad, and SCC Ltd. Kothagudam.

Ph.D : 1983 : Ongoing

R : N. Hanumantha Rao

S : A. Shankariah.

20. ICICI — A performance Evaluation

A : Institutional finance

O : To assess role of financial institutions in backward area development ; examine the physical, financial performance and growth & suggest measures, trends for more effective performance.

M : Primary and secondary data ; statistical techniques from simple arithmetic mean to specific tests.

Ph.D : Nove. 1983 : Ongoing

R : Bhagawan Rao

S : V. Gangoahair

21. Accounting control in public enterprises of A.P.

A : Accounting & Finance

O : To examine the optimality of materials cost ; examine the optimality of labour cost, optimality of overhead costs & evaluate the MIS in sample units.

M : Uses both primary and secondary data. Simple arithmetic mean, regression and tests of significance used.

Ph.D : Nov. 1983 : Dec. 87

R : R. Sudarshan

S : (Ind.)

22. Fertiliser promotion in Andhra Pradesh.

A : Promotion

O : To study the impact of fertiliser promotion programmes on the farming community in the adoption of modern Agropactices.

M : Survey

Gen : Feb. 1985 : Feb. 1987

R : G.V. Bhavani Prasad

S : (Ind.)

23. Viability of credit cooperatives through non-credit business

A : Rural credit

O : Identifying the factors that contribute to the achievement of viability & the means of non-credit business to obtain viability.

M : Field study

Gen : April 1986 : March 1988

R : G. Krishna Murthy

S : (Ind.)

24. Project planning in PEs in India.

A : Finance and Accounting

O : To examine the project planning practices of PEs ; highlight marginal deficiencies & study the procedures regarding feasibility studies etc.

M : —

Gen : Jan. 1987 : Ongoing

R : K. Rajeshwar Rao

S : (Ind.)

25. Profitability of cement Industry —

A study of selected units from Public and Private sectors in India.

A : Financial Management.

O : To examine the trends in the profitability of cement industry in India ; differences in profitability of private and public sector-enterprises and ; analyse the reasons for such position & examine the effect of influencing factors on profitability.

M : Ratio analysis ; correlation and regression used

Gen : April 1987 : Ongoing

R : V. Gangadhar

S : (Ind.)

Institute for Financial Management and Research

26. Behaviour of Share Prices — Statistical Analysis.

A : Portfolio Management

O : Assessing the stock market efficiency in India.

M : —

Ph.D : May 1986 : Ongoing

R : G. Ramachandran

R : S. V. Bokil

Madurai Kamaraj University

27. A Study of Marketing practices in pharmaceutical Industry with special reference to SSI units in Tamilnadu

A : Marketing

O : To study the marketing problems of SSI units in pharmaceutical industry and offer suitable marketing strategies for survival and growth.

M : —

Ph. D. : April 1987 : Completed.

R : R. Jayaraman

S : C. Jayachandran

DEMOGRAPHY

Institute for Social and Economic Change, Bangalore.

28. Return Migration in Kerala : A case study of migrants from Gulf countries.

A : Migration studies

O : To study the problems of return migrants; the social changes due to migration study & examine the economic impact of migration on the household.

M : Primary data supplemented with census and emigration statistics.

Ph. D : June 1987 : June 1990

R : T. V. Sekhar

S : N. Baskar Rao

29. Growth of Towns cities in Karnataka 1961-81.

A : Urbanisation

O : To examine the pattern of population growth of towns & examine the determinants of population growth.

M : Tabular and regression analysis.

Gen : 1986 : 1987

R : N. Baseera Rso

S : (Ind.)

30. An Evaluation study of the Programme of Rehabilitation of bonded labourers in Karnataka.

A : —

O : To examine the nature of the bonded labour system; estimate the extent to which assets given under the rehabilitation & programme are retained and the income generated & the present living conditions of the released labourers.

M : Data from a sample of about 400 released and rehabilitated labourers in 4 districts of Karnataka, supplemented by information from discussions with government officials and social workers. The retention rates are computed using the life table approach. Incomes of

those who had retained assets are compared to those who had not and to the non-beneficiaries to measure impact of programme.

Gen : April 1987 : Jan. 1988

R : P. M. Kulkarni

S : (Ind.)

Sri Venkateswara University, Tirupathi

31. Infant Mortality among fishermen — Bio-social determinants

A : Infant mortality

O : To study the influence of demographic, socio-economic and other developmental variables on infant mortality; the influence of ecological and cultural variables on infant mortality & the availability of health services and its utilization by the clients and their effect on infant morbidity and mortality.

M : —

Ph. D : April 1985 : Ongoing

R : T. K. Vimalakumary

S : M. S. R. Murthy

32. Determinants of fertility differentials among different sect of Brahmins in South Central India.

A : Fertility

O : To know about the general level of fertility among different sects of Brahmins and the crude birth rate and total fertility rate among different sects.

M : A sample of 600 families consisting of eligible couples with one or two living children

consisting of 300 each from two sects collected.

Ph. D : 1986 : Ongoing

R : D. Sai Sujatha

S : M. S. R. Murthy.

33. Socio demographic factors influencing the knowledge of sex and human reproduction among youths.

A : Sex education

O : To know about the concept formation on sex and human; about reproduction, their knowledge and opinion about sex, premarital sex etc.

M : A sample of 600 youth, particularly girls, consisting of 200 each from Harijans, Muslims collected.

Ph. D. 1986 : Ongoing

R : M. S. R. Murthy

S : K. Mahadevan

34. A Study on determinants of Input Morbidity.

A : Health

O : To know the socio economic correlates of infant morbidity; elicit their cause, examine the nutritional and biological correlates of Infant morbidity.

M : —

M. Phil. 1986 : 1987

R : N. Dhanalakshmi

S : M. S. R. Murthy

35. Value and costs of rearing children and their influence on fertility behaviour.

A : Economic Demography

O : To study the values and costs of rearing children among couples belonging to different socio-economic groups and study their influence on fertility behaviour.

M : A sample of 2400 couples belonging to the scheduled and non-scheduled caste groups in the rural areas of Chittoor district (A.P.) used.

Gen : 1984 : 1989

R : D. Usha Rani

S : (Ind.)

ECONOMICS

Andhra University, Waltair

36. Role of Rural Institutions in Rural Transformation : A Case Study of coastal Andhra and South Korea.

A : Agricultural Development.

O : Already reported.

M : —

Ph. D : May 1985 : April 1988

R : R. M. Mohan Rao

S : (Ind.)

37. Impact of Industrialisation and Urbanisation on the quality of human life in Visakhapatnam.

A : Urbanisation

O : —

M : —

Gen : 1985 : May 1988

R : V. Pothana

S : V. (Ind.)

38. Vegetable Oil Imports of India

A : International Economics.

O : To examine trends in the production of oilseeds and edible oils India; trends in the imports of edible oils of India and the determinants of the demand for the imports of edible oils of India.

M : Moving average method; coefficient of variation; range of fluctuations around the mean & ordinary least squares and multiple regression analysis.

Gen : April 1987 : March 1988

R : P. Leela

S : (Ind.)

39. Imports of Non-Ferrous Metals of India.

A : International Economics

O : Examine trends in the imports of non-ferrous metals in relation to the total imports of India; changes in the pattern of imports of non-ferrous metals; factors contributing to the growth in the imports of non-ferrous metals industry in India.

M : The trend analysis; multiple regression analysis and Padma Desai's Models of Import Substitution.

Gen : April 1987 : March 1988

R : P. Leela

S : (Ind.)

40. Gap between the felt need and the benefits received.

A : Evaluation of IRDP

O : To assess the felt need of IRDP beneficiaries and the programmes received and estimate the extent and significance of the gap between them.

M : 4 villages in Visakhapatnam district of A.P. surveyed & all the IRDP beneficiaries will be covered, structured schedule and tabular analysis.

Gen : Feb. 1988 : Ongoing

R : N. Desinga Raj

S : (Ind.)

Sri Venkateswara University, P. G. Centre, Kavali

41. The performance of cooperative central banks in A. P. : A Case of Prakasam District Cooperative Central Bank.

A : Agriculture and cooperation.

O : To examine the structure of capital of Prakasam District Co-operative Central Bank (PDCCB); its performance & estimate the extent of overdues.

M : Primary and secondary data & a structured questionnaire employed. Measures of central tendency and variation also applied

Ph.D : 1987 : 1989

R : M. Rama Rao

S : G. Savaraiah

42. Agrarian Relations in Selected Villages : Prakasam District.

- A : Agricultural Economics.
- O : To examine the production relations in the agricultural sector; analyse the class relations in Indian agriculture & know the crucial interlinkages between the land and labour contracts.
- M : Primary data from the sample households/villages & secondary data from the land records of village/grama panchayat.
Ph.D : 1987 : 1989
- R : N. Balaji
- S : G. Raghava Reddy
43. Farm Finance by commercial banks :
A case study of Guntur district
- A : Banking
- O : To examine the flow of commercial bank finance to agriculture; the performance of commercial banks in Guntur district, know the regional variations in their performance & analyse the repayment behaviour of the beneficiaries of the banks in Guntur district.
- M : A structured questionnaire employed among the sample banks and beneficiaries.
Ph.D: 1987 : 1989
- R : N. Nirmala Mani
- S : G. Savaraiah
44. Local Finance : A case study of Jaladanki Grama Panchayati
- A : Finance
- O : To study the financial resources of the Jaladanki grama panchayati & examine the trends in their developmental and non-developmental expenditures.
- M : Investigates the financial resources in the Jaladanki village over a 10 years period by collecting primary data from Jaladanki panchayati and also by direct personal visits to the institutions.
Ph.D : 1987 : 1988
- R : K. V. Krishnaiah
- S : G. Savaraiah
45. Money supply in India since 1970-71
- A : Monetary Economics.
- O : To examine the money supply in India since 1970-71; assess the role of money multiplier in money supply analysis & describe the relationship between money, output and prices.
- M : Data RBI and Government of India.
Ph. D : 1987 : 1988
- R : S. Ramanjaneyulu
- S : G. Chandrasekar Rao
46. A Study of State Excise duties in A.P.
- A : Public finance
- O : To examine the tax structure of A. P., analyse the changing role of excise duty & compare the tax effort and tax buoyance of excise vis-a-vis other taxes in A. P.

- M : Secondary data from the government publications -A. P. and Govt. of India.
Ph. D : 1987 : 1988
- R : V. V. Rama Prasad
- S : B. Raghavulu Naidu
47. Integrated Rural Development Programme in Chittoor district.
- A : Rural Development
- O : To examine the role of poverty alleviation programmes in India and A. P., the identification of IRDP beneficiaries, economic viability of the scheme, impact of IRDP assistance & the proportion of beneficiaries crossing the poverty line and the strategy to uplift-the remaining above the poverty line.
- M : Primary and secondary data & stratified sampling technique used.
Ph. D : 1987 : 1989
- R : D. Purushotham Naidu
- S : B. Raghavulu Naidu
48. The Role of RRBs in financing agriculture : A case study of Pinakini Grameena Bank.
- A : Rural Banking
- O : To study the flow of agricultural credit by RRBs; examine the performance of Pinakini Grameena Bank with special reference to farm finance & analyse the inter-regional variation in its operations and performance.
- M : The structured questionnaire employed to obtain primary and secondary data in Nellore revenue district.
Ph.D : 1987 : 1989
- R : M. V. Rathnam
- S : G. Savaraiah
49. Impact of Antipoverty programmes on Employment Generation in Nellore District.
- A : Rural Development
- O : To study the impact of anti-poverty programmes on employment generation and incremental income of the beneficiaries; assess the employment generation and incremental income in different regions, periods, castes and categories; estimate the employment and income pattern of the beneficiaries and non-beneficiaries; and evaluate the performance of various components of anti-poverty programmes and suggest measures for the development of the beneficiaries.
- M : —
Ph.D : 1987 : 1989
- R : K. Vijaya Bhaskar Rao
- S : G. Raghava Reddy
50. Tribal Economy in Chittoor District of A. P.
- A : Rural Economy

O : To examine the income and expenditure pattern of sample tribals in Chittoor district ; evaluate the tribal development programmes and examine the nature and character of tribal economy.

M : Primary and secondary data used

Ph. D : 1987 : 1989

R : V. Prabhakara Reddy

S : G. Raghava Reddy

51. International Monetary system and Developing countries

A : International Economics

O : To examine the functioning of the present International monetary system; trace the IMS and its shortcomings and inequalities with regard to developing countries & analyse the evolution of New International Economic Order and its effect on development of the developing countries.

M : The way in which IMS has functioned, did not result adequately in the development of the Developing countries; IMS & NIEO did not meet the requirements of the developing countries

M. Phil : 1986 ; 1988

R : K. Rajagopal Reddy

S : B. Raghavulu Naidu

52. Economic Conditions of Agricultural Labour in Nellore District.

A : Agricultural Economics

O : To study the levels and pattern of income of agricultural labourers; the levels of pattern of consumption expenditure and the composition of their assets and liabilities.

M : Primary and secondary data ; schedule employed among sample agricultural labourers in Nellore district of A.P.

M. Phil : 1987 : 1988

R : Y. Subbarayudu

S : B. Raghavulu Naidu

53. Agricultural Development in Cuddapah district with reference to the selected villages

A : Agricultural Economics

O : To review the trends in the agricultural development of the selected villages of Cuddapah district; examine the changes in the factor markets and the factors contributing thereto & evaluate the distribution of gains from development among different socio-economic units of the villages concerned.

M : Primary and secondary sources.
M. Phil : 1987 : 1988

R : K. Audinarayana Reddy

S : G. Raghava Reddy.

54. Economic Impact of 1986 Godavari Floods in A. P.

A : Disaster Management.

O : To study the economic effects of floods in general; analyse the impact of 1986 Godavari

floods on the economy of A.P. & examine the relief and rehabilitation programmes undertaken by the government and voluntary agencies.

M : Primary data from the sample households in West Godavari district & secondary data from voluntary agencies.

M. Phil : 1987 : 1988

R : K. Koteswara Rao

S : B. Raghavulu Naidu

55. Female Literacy in Andhra Pradesh.

A : Economics of Education.

O : To study the role of women in economic development; evaluate the literacy of women and its impact on economic development & estimate the literacy of women in sample villages.

M : Primary and secondary sources.
M. Phil : 1987 : 1988

R : M. S. Rama Devi

S : G. Chandrasekar Rao

56. Performance of Drought prone area programmes in Prakasam District.

A : Rural Economics.

O : To study the coverage and administration of DPAP; evaluate the performance in Prakasam District & examine the real beneficiaries.

M : Primary and secondary data used.

M. Phil : 1987 : 1988

R : A. Naga Raju

S : G. Raghava Reddy

57.

A : International Economics

O : To examine the magnitude and the extent of external debt of highly indebted countries; study the problems of external debt, servicing charges & their problems.

M : Secondary data from publications of IMF and World Bank, Finance & Development, World Economic Outlook, World Development Report and International Financial Statistics.

M. Phil : 1987 : 1988

R : C. Manikyamba

S : G. Savaraiah

58. Agrarian Relations in Kanduku Mandal.

A : Rural Development

O : To examine the production relations in the agricultural sector; analyse the class relations in Indian agriculture; examine the mode of production in Indian agriculture & bring out the crucial interlinkages between the land and credit contracts, land and labour contract.

M : Secondary data from books and reports, primary data from the sample villages by canvassing a structured questionnaire.

M. Phil : 1987 1988

R : K. Papaiah
S : G. Chandrasekar Rao

Gulbarga University

59. Fisheries co-operative in India with particular reference to Karnataka.

A : Fisheries (Co-operatives)

O : To trace the development & analyse the working of fisheries cooperative societies; identify the problems responsible for the poor state of the fisheries cooperatives in Karnataka and make suggestions to improve their working.

M : Primary & secondary sources.
Ph.D : March 1987 : March 1989

R : Prabhakara. B

S : M. S. Kallur

60. The schemes for providing self employment to educated youth : An Evaluation study of Bijapur District, Karnataka.

A : Self-employment schemes of the Government

O : To examine the nature and dimensions of the problem of the educated employed on the study area; assess the impact of the scheme on target beneficiaries and their attitude.

M : Primary & secondary sources.
Ph.D : Oct. 1987 : Oct. 1989

R : M. S. Chandkavate

S : M. S. Kallur

61. Economic Impact of IRDP : A case study of Gulbarga district.

A : Rural Development

O : It aims at the critical evaluation of the IRDP in the context of Gulbarga district, Karnataka.

M : Primary & secondary sources.
Ph.D : Dec. 1987 : Dec. 1989

R : K. L. Naik

S : M. S. Kallur

62. Urban Growth & Urban Amenities : A case study of Karnataka.

A : Urban Economics

O : To make out a clear cut case for provision of more and more urban amenities to the people of the State.

M : Secondary sources.
Ph.D : Dec. 1987 : Dec. 1989

R : Odeyara Dodda Heggade

S : M.S. Kallur

63. Organisation and Management of lift-irrigation — A Case study in Karnataka.

A : Irrigation Economics

O : Identifying the constraints-technical, economic, institutional etc., assessing the impact of wara bandi system & studying the water-distribution management.

M : Participant observation method, personal interview & tabular method.

Gen : July 1987 : June 1988

R : R. G. Desai

S : —

Institute for Social and Economic Change, Bangalore

64. Role of Taluk Development Boards in Rural Development : Case study of a Taluk in Karnataka.

A : Rural Development

O : To examine the structural and functional aspects of the TDBs, study the process of planning for rural development programmes, examine financial management of TDBs & linkages with other organisations engaged in rural development.

M : Case study method
Ph.D : Oct. 1981 : Jan. 1988

R : N. Sivanna

S : B. S. Bhargava

65. Participation of the rural poor in rural development and delivery system : A case study of Andhra Pradesh

A : Politico-administrative aspects of rural development programmes.

O : To see to what extent rural poor are represented in panchayats and cooperatives etc; what extent rural poor are mobilised outside the formal institutional structures, understand the nature of the delivery system sacred to serve needs of the rural poor at the grass-roots level.

M : For primary investigation, West Godavari selected. 180 beneficiaries from three blocks covered.

Besides administrative functionaries were interviewed & Secondary sources used.

Ph.D : June 1982 : March 1988

R : M. Gopi Nath Reddy

S : Amal Ray S.

66. Agrarian structure and land reform — A case study of Uttara Kannada District.

A : Agricultural Economics

O : To assess how far the twingoals of land reforms — equity and increase in productivity — could be attained in the region studies, and how the reforms were implemented.

M : —
Ph.D : 1982 : 1987

R : G. V. Joshi

S : M. V. Nadkarni

67. Growth and Pattern of State Expenditure — A Case Study of Karnataka

A : Public Economics

O : Observing the overall trends on government expenditure; testing the applicability of few theories, observing the causal relationships among expenditure, receipts and State domestic product.

M : Data based on purely secondary sources. Trend analyses used to observe growth in various categories of expenditure. Two way causation model of Grauger and Srams used.

- Ph.D : June 1983 : Ongoing
 R : K. Gayithri
 S : Hemlata Rao
68. Economics of Pollution Prevention and Control — A Study of Industrial Pollution in Karnataka
 A : Environmental/Industrial Economics
 O : To assess the cost of pollution prevention and control at various levels, examine the impact of pollution prevention, control on the profitability, growth and employment in the concerned firms ; & evaluate the performance of pollution prevention/control in Karnataka.
 M : Based on selected industrial undertakings of different types and sizes, using both actual (observed data) and engineering data (expected) ; secondary data from Annual Reports, ASI Reports, used.
 Ph.D : 1983 : 1988
 R : M. Ravichandran
 S : M. V. Nadkarni
69. Patterns of Population Growth in Nepal
 A : Population Studies
 O : To discuss the patterns of population growth ; relate the observed patterns of population growth with agricultural development, urbanization, industrial development and socio economic development.
 M : Secondary data of population census of Nepal and related agricultural, industrial and socio-economic development variables. 75 districts of Nepal treated as a unit of analysis.
 Ph.D : June 1984 : Ongoing
 R : Devendra Shrestha
 S : P. H. Rayappa
70. An Economic Analysis of Fertiliser Use and Crop Productivity in Andhra Pradesh.
 A : Agricultural economics.
 O : To analyse the economics of use of fertilizers as between different classes of farmers, crops and regions in A.P., analyse the differences in use and impact as between capitalist and family farmers & as between important crops and factors behind them & see whether fertilisers are used as substitutes or organic manure, etc.
 M : Secondary data from Fertiliser Statistics and Season and Crop Reports to study the trends in fertiliser use and crop productivity, data from the Research Station for different levels of fertiliser use, from the cost of cultivation scheme schedules on the different aspects of production process and compared with the research station data.
 Ph. : June 1984 : June 1988
 R : D. Sunitha Anand Raj
 S : M. V. Nadkarni
71. Economics of Rural industries in Karnataka

- A : Industrial Economics.
 O : To study employment pattern across different rural industries, employment potential of different rural industries, the problems of marketing and finance, the factors which facilitate / hinder the growth of rural industries.
 M : Study is confined to the most developed in terms of employment, five industries of the National Industrial classification, 1970 in the rural areas in two districts in Karnataka.
 Ph. D : June 1985 : May 1989
 R : M. H. Balasubramanya
 S : M. Prahladachar
72. A Study of Income Inequalities in rural Tamil Nadu.
 A : Rural Development.
 O : To study the pattern of and causes for inequalities in the State between 1961-62 to 1983; between different socio-economic groups in rural areas at different levels of development & within the socio-economic groups.
 M : Two stages of secondary and primary data. Secondary data — schedules of the NSSO. Primary data — Household in three villages in the districts of Thanjavur, Coimbatore and Dharmapuri at different levels of rural development.
 Ph. D : June 1985 : Dec. 1988
 R : U. Jayalakshmi
 S : Abdul Aziz
73. Decision making process of farmers with respect to price and non price factors in crop cultivation in Tamilnadu.
 A : Agricultural Economics.
 O : To examine the decision making process of farmers on a given land at a particular point of time; analyse the yield response of farmers, probe the differential elasticities of marketed surplus & evaluate farmers reactions to agricultural policies.
 M : Comparative study of two dimensional nature, i.e. comparison of irrigated with dry region and within each region & comparison of the decision making process of different classes of farmers.
 Ph. D : June 1986 : Ongoing
 R : N. Raja Sekaran
 S : R. S. Deshpande
74. Budgetary implications of food and fertilizer subsidies of Govt. of India.
 A : Public Finance
 O : To analyse the factors responsible for the growth of subsidies over the years; the impact and true beneficiaries of subsidies wherever possible and the growth and composition of subsidies in total government expenditure, deficit financing etc.
 M : —
 Ph. D : June 1986 : 1989
 R : V. Selvaraju
 S : G. Thimmaiah
75. Impact of Institutional Credit on Rural Poor with reference to the

- performance of a Regional Rural Bank in Karnataka
 A : Rural credit
 O : Evaluate the performance of Regional Rural Banks; impact of RRBs credit on weaker sections & study the viability of RRBs.
 M : Evaluate the performance of Regional Rural Banks to understand the impact of their credit on rural poor with the help of secondary primary data.
 Ph.D : June 1986 : July 1989
 R : H. S. Shylendra
 S : H. G. Hanumappa
76. Import substitutions and industrial restructuring : A Case study of Indian Engineering Industry, during 1966-1986.
 A : Industrial Economics
 O : To analyse the structure of imports by sector-origin, through the period 1966-86 ; identify the determinants of Engineering Exports at the aggregate and disaggregated levels & analyse the role of non-price factors in promoting import substitute of Export Promotion activities.
 M : Secondary data
 Ph.D : June 1987 : June 1990
 R : Abdul Kareem P.
 S : Rameshwar Tandon
77. Economics of Watershed approach to dry land development
 A : Agricultural Economics
 O : To study the process of the approach ; the nature of involvement of people in the project and the impact of this approach on farmers income, asset formation.
 M : Selection of a Micro Watershed (sample design), Collection of Secondary and primary data.
 Ph.D : June 1987 ongoing
 R : S. Lakshmikanthamma
 S : R. S. Deshpande
78. Plan Transfers and Inter-State Disparities In India
 A : Public Finance
 O : To Analyse various sources of Major states plan finances ; critically examine the allocation of plan transfers from Central Government to major states in India and investigate the influence of pattern of plan transfers allocation over the efforts of State Governments in Mobilising Resources for plans.
 M : —
 Ph.D : June 1987 — June 1990
 R : G. Chokkalingam
 S : Hemlata Rao
79. Role of Animal Power use in Agriculture
 A : Agriculture
 O : To analyse the draught animal use in agriculture vis-a-vis mechanisation and study the socio, economic and environmental factors which determines

- the draught animal power use in agriculture.
 M : Primary and secondary data used for understanding the nature and determinants of draught animal use in agriculture in order to find out the inter-relationships among different determining factors, suitable statistical techniques used.
 Ph. D. June 1987 — June 1990
 R. S. Rajendran
 S. H. G. Hanumappa
80. Economics of Small ruminants in Drought prone Areas of Karnataka.
 A : Agricultural Economics/Environmental Economics
 O : To assess the role played by small ruminants in drought prone areas, and in the household economy in such regions; study their profitability, viability, and factors affecting the same for different classes of sheep and goat rearers; identify economic and environmental problems faced by them & assess their role in spreading risks and helping farmers to survive droughts.
 M : Analysis of secondary data at the regional level, and primary data at the village and household level in two selected villages.
 Ph. D. June 1987 — 1991.
 R : Syed Ajmal Pasha
 S : M. V. Nadkarni
81. Political Economy of Forest Use and Management in the Context of Integration of a Forest Region into the Larger Economy
 A : Political Economy / Environmental Economics
 O : To study how forest use and management take place at various historical stage of development of the region as between different interested parties, and with what consequences on the health of forests and the local economy.
 M : Historical study at the regional level (including both historical documents and secondary data), supplemented by a study of local economy through a survey of selected villages to get a micro level view of contemporary local economy.
 Gen : 1984 : 1987
 R : M. V. Nadkarni
 S. A. Pasha and
 L. S. Prabhakar
 S : (Ind.)
82. IRDP and Rural Diversification — A study in Karnataka
 A : Poverty
 O : —
 M : —
 Gen : Completed
 R : V. M. Rao and
 S. Erappa
 S : (Ind.)
83. Impact of irrigation and multipurpose projects on social, economic and

environmental conditions in Ghataprabha Command area.

A : Command Area Development — Water Management

O : To measure the impact of irrigation on cropping pattern, productivity of crops, income, saving and investment of farmers, measure the water use efficiency and examine adverse effects of irrigation on ecology and environment of the region.

M : Pre-irrigation socio-economic bench-mark study conducted in 1974-75 in the command area. 32 villages and 500 Households selected. After a gap of 12 years the same villages and the same households which were studied in 1974-75 have been visited again in 1986-87 to study the impact of irrigation on rural community.

Gen : April 1985 : March 1988

R : M. Venkata Reddy

S : (Ind.)

84. Issues in Development of Hill Regions

A : Agricultural Economics

O : To examine the economics of Jhum cultivation and changes in crop pattern and reasons; examine the impact of new technology on agriculture in hills regions and also assess the impact of development; extent of commercialisation of agriculture in hill regions and the role of infrastructure in Hill Area Development.

M : Quantitative methods and descriptive status.

Gen : Nov. 1986 : ongoing

R : K. N. Ninan

S : (Ind.)

85. Economics of Urban Water Supply

A : Rural Economics

O : To study Supply and Demand — spatial variations in urban water supply, capital and recurring costs, pricing patterns, revenue mobilisation.

M : 145 towns by size class; by source of water and by method of distribution of water supply in Karnataka selected.

Gen : 1985 : 1988

R : M. Nageswara Rao

S : (Ind.)

86. Factors promoting and Inhibiting the access of Small and Marginal Farmers to lift irrigation in Karnataka.

A : Agricultural Economics

O : To study to what extent the small and marginal farmers (SMFs) are able to participate in lift irrigation in the state, factors promoting or inhibiting the access of SMFs to lift irrigation in the state.

M : In the first stage, districts wherein the proportion of net cropped area required is above stage, average alone are considered. In the second stage

from among these districts, only those where atleast 1/3 of net irrigated by wells alone are retained. Only two districts where the share of small farmers in well irrigated area is relatively high and relatively low respectively are located.

Gen : June 1985 : Dec : 87

R : M. Prahladachar

S : (Ind.)

37. Rural Energy consumption pattern in Karnataka

A : Rural and Industrial Economics

O : To study the consumption pattern and problems relating to rural energy and to assess the impact of new Technology

M : To assess the industrial atmosphere in Karnataka, Evaluation of Industrial Policy of the State and Centre, programmes for development of backward area etc. Practical difficulties faced by entrepreneurs, financing agencies and other organisations and to assess the availability of socio economic infrastructural raw material for Industrial development.

Gen : Oct 1985 : Sep 1987

R : Hemlata Rao
Abdul Aziz

S : (Ind.)

88. Ownership change in small scale industries in Karnataka.

A : Industrial Economics

O : To assess the impact of ownership change on agricultural structure; technology, output, market strategy and financial performance.

M : Field data based — by carrying out 15 intensive case studies

Gen : June 1986 August 1987

R : Abdul Aziz
Hemlata Rao

S : (Ind.)

89. Cost Efficiency of Family welfare programme

A : Demography

O : To understand whether family planning programmes carrying out sterilizations is more effectively done through clinics or camps

M : Estimation of direct and direct costs

Gen : April 1986 : March 1987

R : Johnson Samuel and
B. M. Dinesh

S : P. Hanumantha Rajappa

90. Rural Community water Supply systems — Facts of Development

A : Economics

O : To study the disributional patterns of drinking water sources; Functional status and adequacy levels of safe water sources; environmental hygiene and public health indicators.

- M : Sample survey of 561 villages in 19 districts of Karnataka and 1600 sample households
Gen : Oct : 1986 : March 1988
R : M : Nageswara Rao
S : (Ind.)
91. Techno-socio-Economic Survey of fisherman community
A : Rural Economics
O : Techno, social, economic and demographic characteristics of marine and inland fishermen communities in Karnataka.
M : 2400 marine school fishermen households and 700 inland sector fishermen households by water source selected.
Gen : March 1987 March 1988
R : M. Nageswara Rao
G. Thimmaiah and
P. Thippaiah
S : (Ind.)
92. Determinants of cotton textile exports
A : International economics
O : —
M : —
Gen : June 1987 : July 1988
R : Rameshwar Tandon
S : (Ind.)
- Cochin University of Science & Technology
93. Women Entrepreneurship in the Industrial Manufacturing Sector of Kerala.
A : Women Studies
O : To study the pattern and extent of supply of women entrepreneurs, critically review the ongoing women entrepreneurial development programmes.
M : The entrepreneurial support system and assess the relative effect of psycho-cultural, economic and situational factors both as inhibitors and promoters of small entrepreneurship. Tabular and statistical tools used.
Ph.D : August 1985 ongoing
R : Anna V.
S : N. Chandrasekharan Pillai
94. Movement of input and output prices of rice in Kerala and its impact on Area, Yield and Output
A : Agricultural Economics
O : To analyse the trends in area, yield, total production, input and output prices of rice in the state, districts and taluks ; estimate the impact of input and output prices on area, yield and total production of rice in the state, districts and selected taluks and the nature of price control and public distribution system in Kerala and the agricultural price policy of the Government.
M : Both tabular and statistical tools adopted using secondary data
Ph.D : Dec. 1984 : May 1988
R : Thressamma K. V.
S : K. C. Sankara Narayanan

95. Impact of the Social Forestry Programmes on Rural income and Employment potential in Kerala.

A : Forestry Economics
O : To find out whether the social forestry programmes implemented could generate additional income and employment in the rural economy of Kerala, how far the scheme covered the utilisation of waste land in Kerala ; identify the various schemes implemented and evaluate the importance of the programme to compensate the economic loss created by ongoing deforestation in the State and evaluate the role of this scheme in meeting the basic needs of the rural population and for improving their standard of living.

M : The study is based on the Primary and Secondary data collected from various sources such as (1) workers, (2) farmers and (3) officials in three selected districts where the schemes have wide coverage. These districts will be selected at random on the basis of the classification—highland, midland and lowland. Separate schedules will be used for collecting the data.

Ph.D : Jan. 1987 : March 1989

R : V. P. Varghese
S : K. C. Sankaranarayanan

96. Linkages of Electrical Machinery Industry : A case study of Kerala.

A : Industrial Economics
O : To study the growth of the industry in Kerala, types of raw

materials used either from Kerala or imported, cost calculation - demand function/supply function and demand linkages and supply linkages.

M : Secondary sources
Ph.D. Jan. 1987 to 1990.

R : Usha Kumari. K

S : M.K. Sukumaran Nair

97. Economics of Arecanut cultivation in Kerala — A critical Evaluation.

A : Agriculture

O : To analyse the trends in Area and production of Arecanut in Kerala since 1969 - 1970, the changes in its cost of production, calculate the profitability of arecanut cultivation and to compare it with other competing crops.

M : Trends in variations of economic variables analysed, with secondary data available from various Government and Semi-Government sources.

M.Phil : Jan. 1987 : Jan. 1988

R : Baby Joseph

S : K.C. Sankaranarayanan

98. Development process of Malappuram District — An economic Analysis.

A : Developmental Economics

O : Evaluation of Development process since 1969 sector-wise, analysis of economic variables viz. income, employment etc., inter-district comparison of the important economic variables.

M : Trends of variations in economic variables analysed with the help of secondary data.

M.Phil : Jan. 1987 : Jan. 1988

R : P. Anvar

S : K C. Sankaranarayan

- 99 The Economics of Rubber based industry in Kerala — An analysis of Kottayam District.

A : Industrial Economics

O : Analysis of the area, production and yield of natural rubber in the state and in the Kottayam District, study the development of rubber based industry in Kerala, the price movements of natural rubber, synthetic rubber and finished rubber products; investigate the growth of rubber based unit in Kottayam district, the capital structure and capital utilisation of the rubber based industries in the district.

M : Mainly analytical. Based on both published and unpublished data. Analysis of Capital structure using the data obtained from the balance sheets of the concerned units.

M. Phil : Jan 1987 : Jan 1988

R : Raju K. V.

S : Jose T. payyappilly

100. Impact of Trade unionism on the Industrial development of Kerala.

A : Industrial Economics

O : To study the empirical evidence to prove the alleged industrial stagnation in Kerala, analyse

the pattern of Trade union development in the state and inter-relation between trade union growth and industrial stagnation in Kerala.

M : Secondary data from Annual Survey of Industries (ASI), & association between labour variable and industrialisation in the state analysed with the help of empirical treatment.

Gen : Jan 1987 : Jan 1988

R : M. M. Thampy

S : M. K. Sukumaran Nair

University of Kerala

101. Educational Planning and Man-power Industries in Kerala

A : Education and Employment

O : To trace the evolution of the educational sector in Kerala and the socio-economic compulsions underlying it; examine the mismatch between educational expansion and demand for manpower, explain the paradox of rising demand for educational places and mounting unemployment.

M : Historical and case study

Ph. D. 1981 ongoing

R : Joseph A. Thomas

S : P. R. Gopinathan Nair

102. Housing Boom in Kerala

A : Economics of Housing

O : To examine the secular trends in the house construction sector

in Kerala and point out its difference from that of the rest of India; locate the boom in housing and analyse the factors and consequences of the housing boom

M : Historical, supplemented by case study

Ph. D. ongoing

R : G. Gopikuttan

S : P. R. Gopinathan Nair

103. An Enquiry into Economic Roots of Communalism in Kerala

A : Communalism

O : To prove that communalism is rooted in the economic problem of Kerala

M : Historical study of the economic roots of communalism in Kerala

Ph. D. ongoing

R : P. J. James

S : S. Uma Devi

104. External Financing in the Economic Development of India

A : International Economics

O : To study the effect of external financing on India's economic development in the context of the world wide debt problem of most of the third world

M : —

Ph. D : ongoing

R : V. Asokan

S : S. Uma Devi

105. Corporate Sector and Working capital Development in India

A : Industrial Economics

O : To study whether the task of availability of finance for the working capital stands in the way of the growth of the industrial sector by looking into the working capital requirements of different industries, method of source of finance and effect of monetary policy and analysis based on the RBI data

M : —

Ph.D. Oct. 1986 : ongoing

R : M. L. Jayaram Nayar

S : S. Uma Devi

106. Structure of Markets for cash crops : An economic analysis with particular reference to Kerala

A : Agricultural Economics

O : To study the structure of markets for rubber & coconut namely whether they can be classified as a case of Bilateral monopoly or Oligopolistic.

M : —

Ph.D : March 1987 : ongoing

R : R. Satheesh Kumar

S : Uma Devi

107. The relevance of Keynes-Robertson Controversy for India

A : Monetary Economics

O : To highlight the controversies between Robertson and Keynes

- in particular with regard to the role of rate of interest as an instrument of monetary policy, whether it is Keynesian or Robertson Theory which is more applicable to the Indian context.
- M : The empirical data on the interest rate policy and its impact in India analysed.
- Ph.D. March 1987; ongoing
- R : Beena Narayanan Nayar
- S : S. Uma Devi
108. Economic utilization of irrigations water: A case study of Periyar Valley Project
- A : Economics of Irrigation
- O : To examine the Problems of utilizations of irrigation water in Kerala; examine the feasibility of River Valley project and other source of irrigation in Kerala and estimate the cost and benefit of Periyar valley project.
- M : A case study method
- Ph.D. Oct. 1987 ongoing
- R : K. A. Sunny
- S : G. Karunakaran Pillai
109. Economics of alternative sources of rural water supply with special reference to Kerala
- A : Economics of Irrigation
- O : To examine the alternative sources of rural water supply in Kerala and estimate the costs and benefits of alternative sources of water supply in Kerala
- M : case study
- Ph.D. Sept. 1987; ongoing
- R : Jacob John
- S : G. Karunakaran Pillai
110. Tenurial changes and Agricultural performances: A micro analysis with particular reference to polpully village, Palghat
- A : Agricultural Economics
- O : To look at farming practices and production techniques as a historical process of which land reforms constitute but one link in a long chain of causative factors.
- M : Secondary data to trace the development of tenurial condition in Malabar, the lines on which land reforms were conceived and implemented in Malabar, case study of Polpully village, to analyse the impact of land reforms on agricultural performance as evidenced by use of high yielding varieties of seeds, tractors, fertilizers etc.
- M.Phil: Jan 1985 : Nov 1987
- R : K.P. Venugopalan
- S : E.T. Mathew
111. Printing Industry of Kerala
- A : Industrial Economics
- O : To examine whether the cost of printing in Kerala is higher than in Tamil Nadu and that this high cost is the chief constraint on the development of the printing industry, study the structure of printing industry in Kerala and its input market and cost structure and highlight the problems and prospects of the industry.
- M : Secondary data and a sample survey of printing units in Kerala and Sivakasi.
- M.Phil: Jan. 1985 : Nov. 1987
- R : M. Jayaprakash
- S : K. Ramachandran Nair
112. Capacity utilisation in the Handloom Industry in Kerala with special reference to Weavers Industrial Society.
- A : Industrial Economics
- O : To measure empirically the extent of capacity utilisation in the handloom industry in Kerala; examine the regional difference and the factors influencing them.
- M : sample survey of 16 weavers industrial co-operative which forms about 17% of the total number of weavers.
- M.Phil: Jan. 1985 : Nov. 1987
- R : P.M. Manuel
- S : E.T. Mathew
113. Issues in Industrialisation at the district level — A case study of Ernakulam District
- A : Regional Economics
- O : To trace the pattern of industrialisation at the district level with a view to highlight issues relevant to the regional level, analysis the demographic changes in the district, the determinants of industrial location of saw mills, sea foods, printing press and Metal products.
- M : Analysis of Census, ASI data supplemented by a field survey of a random number of units at the district level.
- M.Phil: Jan. 1985 : Nov. 1987
- R : M. Varghese
- S : K. Ramachandran Nair
114. Women Entrepreneurs of Kerala: A case study of selected units in Trivandrum
- A : Industrial Economics
- O : To analyse the nature and problems in the formation and organisations of the units run by women entrepreneurs, particularly in the area of capital and finance, examine the problem of production and output, associated with technical skill, managerial expertise and marketing of products and identify the special problems of women entrepreneurs in contrast to their men counterparts.
- M : case study method
- M. Phil: Dec. 1985 : July 1987
- R : Shaila Devi S. G.
- S : G. Karunakaran Pillai
115. Pre-primary Education in Kerala
- A : Economics of Education
- O : To investigate the economic efficiency of the pre-primary education sector; evaluate the performance of the public sector and private sector separately and draw policy conclusions for

- strengthening the pre-primary education sector
 M : case study method
 M.Phil : Jan. 1986 : Jan. 1987
 R : Abdul Salim
 S : P. R. Gopinathan Nair
116. Educational Backwardness of muslims in Kerala
 A : Economics of Education
 O : To identify factors of educational backwardness of Muslims in Kerala, examine the impact of their educational backwardness on economic conditions and draw generalisations about the educational — economic linkages and suggest policy interventions
 M : Historical and exploratory
 M.Phil. Jan 1986 : Jan 1987
 R : Abdul Karim
 S : P. R. Gopinathan Nair
- Annamalai University**
117. Impact of Irrigation on Urbanisation in Mayiladuthurai.
 A : —
 O : —
 M : —
 Gen : 1987-88
 R : M. Aruna
 S : C.T. Mohan
118. A Study of Productivity of the Madura Coats Ltd. Tuticorin
 A : —
 O : —
 M : —
 Gen : 1987-88
 R : J. David Gnanaraj
 S : C.T. Mohan
119. A Study of the Finances of Sivakasi Municipality
 A : —
 O : —
 M : —
 Gen : 1987-88
 R : S. Rajendran
 S : C.T. Mohan
120. Cost-Benefit Analysis of Pollution
 A : —
 O : —
 M : —
 Gen : 1987-88
 R : R. Usha
 S : C. T. Mohan
121. Sales Tax in Tamilnadu
 A : —
 O : —
 M : —
 Gen : 1987-88
 R : Sivakumaresan
 S : A. V. Rangachari.

122. Drought and its Effects in Tamil Nadu
 A : —
 O : —
 M : —
 Gen : 1987-88
 R : M. Vijaya
 S : A. V. Rangachari.
123. Social Cost Benefit Analysis
 A : —
 O : —
 M : —
 Gen : 1987-88
 R : J. Ursula Irudayamary
 S : A. V. Rangachari.
124. Productivity of crops with special Reference to Konakirirajapuram village
 A : —
 O : —
 M : —
 Gen : 1987-88
 R : A. Krishnamurthy
 S : G. Vinayakam.
125. Economics of Rubber Cultivation in Kalkulam TK.
 A : —
 O : —
 M : —
 Gen : 1987-88
126. Production and marketing of betel leaves, in Lalapet.
 A : —
 O : —
 M : —
 Gen : 1987-88
 R : N. Rajapal
 S : G. Vinayakam
127. Consumer Behaviour and Marketing — A Study in Chidambaram Area.
 A : —
 O : —
 M : —
 Gen : 1987-88
 R : V. Alli.
 S : R. Elango.
128. Industrial Relations in N.L.C.
 A : —
 O : —
 M : —
 Gen : 1987-88
 R : G. Raja Mohan
 S : R. Elango
129. Bank Financing and Functioning of Small scale Industries in Adirama-pattinam.
 A : —
 O : —

- M : —
Gen : 1987-88
R : V. Dhanabalan
S : N. Malathi.
130. Impact of Bank Finance for I.S.B. Sectors in Chidambaram Town.
A : —
O : —
M : —
Gen : 1987-88
R : P. Janaki
S : N. Malathi.
131. Human Resource Development.
A : —
O : —
M : —
Gen : 1987-88
R : G. Usha Rani
S : N. Malathi
132. Economics of Rice-bran oil produced by FCI, Sembanarkoil, Tanjore DT.
A : —
O : —
M : —
Gen : 1987-88
R : T. Chitra
S : M. Arumugam.
133. A study of Industrial Accidents with reference to N.L.C.
A : —
O : —
M : —
Gen : 1987-88
R : K. Sendhil Kumar
S : M. Arumugam.
134. A case study of Pontex.
A : —
O : —
M : —
Gen : 1987-88
R : S. Vasanthi
S : M. Arumugam.
135. Urban Economics — A study of urban poverty with special reference to Mayiladuthurai town at Tanjore DT.
A : —
O : —
M : —
Gen : 1987-88
R : S. Rajarajeswari
S : T. S. Kalyani.
136. Labour absorption in agriculture with special reference to Kallakurichi block, in South Arcot DT.
A : —
O : —
M : —
Gen : 1987-88

- R : N. Sekar
S : T. S. Kalyani.
Gen : 1987-88
R : K. Sudalai Muthu
S : N. Ramgopal.
137. Impact of tribal development programme in Coonoor taluk
A : —
O : —
M : —
Gen : 1987-88
R : N. Ravindran
S : T. S. Kalyani.
138. Dairy farming development co-operatives at Perundurai block
A : —
O : —
M : —
Gen : 1987-88
R : N. Shanmuga Sundaram
S : A. K. Ramalingam.
139. Economics of urban house rent and land use at Chidambaram
A : —
O : —
M : —
Gen : 1987-88
R : C. L. Vasanthi
S : A. K. Ramalingam
140. Cement industry at Thalaiyur.
A : —
O : —
M : —
- Bharathidasan University,
Tiruchirapalli**
141. Socio — Economic Conditions of Agricultural and Non-Agricultural Female workers in Manikandam Village, Trichy Dt
A : Agriculture
O : To analyse the employment opportunities of agricultural and Non-agricultural women labourers; study the pattern of the income and expenditure of both group of labourers & investigate the nature and extent of debt and analyse the basic reasons for it among the women labourers.
M : Empirical study based on field data. Random sampling adopted in this village and households wise chosen for interview by the use of Random numbers. The primary data by interview method related to religion, caste, consumption, saving, investment details, marital status, education, income, employment, and indebtedness.
M.Phil : October 1985 : Nov. 1987.
R : K. Chithra
S : S. Lakshmi
142. A study on the performance of Urban co-operative Banks in Tiruchirapalli Town.

- A : Economics of Co-operative Banking.
- O : To assess the performance of Urban Co-operative Banks ; the Deposit mobilization, Credit extensions, overdues and profits & analyse the nature and extent of credit requirements of people fulfilled by these banks.
- M : sampling method by means of schedules, relevent materials were gathered, averages ratios etc applied.
- M.Phil : October 1985 : August 1987.
- R : A. Saleem Batcha
- S : C. Thangamuthu.
143. The Study of the Marketing and Consumption of Fuelwood in Tiruchirapalli Town.
- A : Fuel Economy
- O : To analyse the sales procedure of the different types of traders and find out the sources of firewood supply to Tiruch; market ; Evaluate the investment, marketing cost, sales turnover and profit on one side and cooking habits & analyse the consumption pattern of household and non hosehold sectors (like Hostel/Hotel)
- M : To find out marketing of firewood and consumption patterns in household and nonhousehold sectors, analyse the marketing cost, investment, profit, sales turnover on one side and analyse the cooking habits, consumption pattern of firewood in Trichy town.
- M.Phil : October 1985 : Nov. 1987.
- R : S. Sekar
- S : C. Thangamuthu.
144. Socio Economic Conditions of Beedi Workers in Kajamalai Tirchy Taluk.
- A : Industrial Economics
- O : To study the social background of the beedi workers, ie. age composition, family size, educational standards and health conditions, the economic conditions through indicators like income, expenditure, saving and debt and whether workers enjoy any welfare facilities which were introduced by the government and to suggest ways and means of improving their conditions
- M : Census method
- M.Phil: October 1985:Nov. 1987
- R : S. Santhana Lakshmi
- S : C. Thangamuthu.
145. Socio Economic Conditions of Metal Workers (Aluminium) in Tiruchirapalli Town.
- A : —
- O : To study the income and expenditure pattern of the metal workers, the saving and indebtedness position of the metal workers and suggest practical policy measures to improve the economic conditions of these workers.

- M : Census method
- M.Phil : October 1985 : Nov. 1987
- R : B. Shanthi
- S : S. Lakshmi.
146. The Productivity of Lands in Dry Farming in Thathanur Village in Udayarpalayam Taluk of Tiruchirapalli District.
- A : Agricultural Economics
- O : To find out the production per acre in relation to the size of holding of land ; understand the productivity of commercial and food crops including farming, examine the cost structure and productivity of different dry crops in different farm size.
- M : The selected village Thathanur has 1144 households as a total, out of the total households 900 which own land 10% of households has been selected as sample out of 90 farmers selected were marginal, small and large farmers. The proportional allocation has been made for each data by systematic random sampling.
- Gen : December 1985; November 1987.
- R : C. Appadurai
- S : S. Lakshmi
147. A Study on Woman Entrepreneurs in Madras City
- A : Industrial Economics
- O : To study the source, economic background of WES. organisation ; the problems faced in the field of production ; marketing
- the areas offering scope specially to WES and their promotion.
- M : primary survey Madras City. 30 WES were interviewed personally and questions asked regarding social & economic background, type of the product, animal, investment costs, profit and type of the loan etc. A secondary data was also collected from Women entrepreneurs association, Women entrepreneurs cell, Indian Bank, Small industries service (Institute (SISI) and Canara Bank to review the assistance help rendered by these institutions.
- M.Phil : Jan 1986 : Sep 1981
- R : Sarubala Rajagopal
- S : Thangamuthu
148. Public Sector Engineering Industries with Reference of HMT.
- A : Industrial Economics
- O : To study the fianancing pattern of the Heavy Engineering Industries, Medium and light engineering industries and HMT; analyse the capacity utilization of the above three and evaluate the performance.
- M : The period of the study is 1972-73-1983-84 and how the above three public sector groups are financed through various source of finance (paid up capital, loans and deferred credits, Banks loans and Internal reserves) ; comparative study between the above three sectors for capacity and filled trend line by framing the equation $y = a + bx$. It has analysed various performance criteria

(profit criteria, sales criterion etc) The entire study has relied on public enterprises survey Vol. I-II 1970-71, 1983-84.

M.Phil : July 1986 : March 1987

R : R. Murugesan

S : S. Lakshmi

149. The performance of cement industry in Trichy Dt.

A : Industrial Economics

O : To study the performance and problems of cement Industry in Tamil Nadu with special reference to Trichy Dt, examine the financial performance of the Dalmia Cements and Chettinad Cements (1974-84) analyse the physical performance of the Dalmia Cements and Chettinad Cements (1974-84).

M : The financial performance of both firms tested by Ratio analysis & the physical performance of the firms by Trend analysis based on primary and secondary sources & covers a period of 10 years.

M Phil : July 86 : March 87.

R : K. Arthanari Easwaramoorthy.

S : S. Lakshmi.

150. The Performance of Industries in Pudukkottai Districts.

A : Industrial Economics.

O : To trace the growth of industries in Pudukkottai district during the period 1972-86 ; analyse the types and magnitudes of incentives and concessions

availed by the small scale industries ; examine the entrepreneurial dimensions of those who have availed the incentives and concessions offered by the various agencies.

M : To ensure randomness of selection ; simple random sampling method was adopted ; only 47 small scale industrial units were taken as sample size (5 per cent of the population) from the total number of 237 registerey with SSI units. The list of industries collected from primard and secondary sources.

M.Phil : July 1986 : June 1987.

R : T. Prema

S : C. Thangamuthu.

151. A study on the Socio — Economic conditions of handloom weavers in Sengunthapuram Village, Trichy District.

A : Labour Economics.

O : To study the socio-economic conditions of the Weavers in co-operative society and under private system ; assess the differential income and expenditure patterns of the handloom weavers and power loom weavers & the government measures to improve the working conditions of weavers.

M : Field survey method and personal interview techniques used. The enquiry covers a sample of 100 weavers in the village. The population of the study area consists of five types of weavers namely; owner handloom weavers

working under society (s. w.) Loomless weavers working under Anna Industrial Handloom weavers (c. w.) weavers working under master weavers (w. w / m. w.) Power loom weavers (p. w.) Master and weavers (m. w.)

M.Phil : July 1986 : June 1987

R : G. Annadurai.

S : C Thangamuthu.

Mother Theresa University
Kodaikanal

152. Role of women in the production of Paddy in Neernallure, Tirunelveli Dist.

A : Agricultural Economics.

O : To assess the socio background of the women agricultural labourers, examine the inter-relationship between employment, unemployment & poverty & find out differences in wages & the contribution of female towards production.

M : Sampling and direct interview method.

M.Phil : May 1987 : June 1988.

R : N. Shantha

S : (Ind)

153. Womens participation rates in paddy Production - Nalikalpatti, Salem Dt.

A : Agricultural Economics-special reference to women.

O : To study income & expenditure ; wage differentials, socio-economic condition of women.

M : —

M.Phil : May 1987 : June 1988

R : N. K. Kalpanadevi

S : —

154. Working problems of female agricultural labourers in Chingleput Dt.

A : Agricultural Economics with special reference to women.

O : To find out the occupational, hazards of women in Agriculture analyse their contribution towards family expenditure, whether their income is primary or secondary ; know whether the modern methods of Agriculture are used by them.

M : Primary and secondary data used.

M.Phil : June 1987 : July 1987.

R : Sai. Thilagam.

S : —

155. Contribution of female agricultural labourers in cash crops — Saidapet Taluk.

A : Agricultural Economics.

O : To find out the correlation between wages and time worked ; status of female labourers compared with male productivity per Acre.

M : Random Sampling method.

M.Phil : May 1988 : June 1988

R : Millie Nihila

S : —

156. A study of female agricultural labourers in upper hill-Kodaikanal.

A : Agricultural Economics related to women's studies.

O : To study the condition of agricultural labour in general and to make a comparative analysis of the male and female workers in terms of wage differentials; hours of work, job security and the nature and type of employment; quantify the female labourforce in agriculture and to study the nature, type and problems of female labours & the position of women workers in the agrarian society in upper kodaikanal hill.

M : Random sampling method, primary data collected directly from the households of agricultural labourers.

Gen: July 1987 : July 1988

R : A. Kalaimathi.

S : (Ind)

Madurai Kamaraj University

157. Reference to Mobilisation of rural Deposits and Lending to Priority Sectors.

A : Rural Banking

O : To evaluate performance of Pandian Grama Bank in respect of its objectives, comparison with PACs, DCCBs, Commercial Banks and the impact of PGB on the borrowers & study the liability & Profitability of PGB.

M : Primary & Secondary data through pre tested schedules,

Random sampling, interviews among agricultural and non agricultural borrowers. Linear growth rates and compound growth rates applied.

Ph.D : December 1979 : April 1987.

R : S. P. R. Senthappan.

S : K. S. Sonachalam.

158. Minor Irrigation in Tamil Nadu- Growth, Development Benefit and Cost

A : Agriculture : Irrigation

O : To review the growth of minor irrigation schemes & evaluate the cost benefit of minor irrigation schemes.

M : Based on secondary data collected from Irrigation dept.

Ph.D : September 1981 : September 1988

R : R. Murugan.

S : K. S. Sonachalam.

159. Impact of IRDP on the Eradication of Poverty among weaker Sections in Tirunelveli Dt. of Tamil Nadu. A Demographic Profile of the Socio Economic Conditions of the three Villages.

A : Rural Economics.

O : To assess the economic conditions of the beneficiaries, evaluate the effect on the beneficiaries, study the repayment performance of the beneficiaries.

M : Selected three blocks of the Tirunelveli belt on the basis of performance with the help

of D. R. D. A office records; Three villages in each block having the largest animal husbandary beneficiaries selected.

Ph.D : Feb. 1986 : June 1988.

R : S. E. Sakky

S : (Ind.)

160. Impact of National rural Employment Programme (NREP) in eradicating poverty among the rural poor in Kamaraj Dt. of T. N.

A : Rural Economics.

O : To find out the generation of additional employment and income of the beneficiaries of NREP., assess the change in nutritional status and living standard of the rural poor after implementation of NREP & study the awareness of rural development programme.

M : Kamaraj Dt. selected and three blocks on the basis of utilisation of funds, man days generated, and the survey conducted for 400 respondents in 6 villages.

Ph.D : Sep. 1986 : September 1988.

R : M. Soundarapandian.

S : K. Ramachandran.

University of Madras

161. Corporate Public issues (With Special Reference to Equity issues of Industrial Companies in South India)

A : Industrial Economics.

O : To determine factors influencing timing of public issues., extent of over subscriptions and cost of public issues.

M : —

Ph.D : 1982 : 1987

R : Indumathi Parthasarathi

S : U. Sankar.

162. An Optimum rate Structure for Electricity in Tamil Nadu.

A : Public Enterprises.

O : Propose an optimum rate structure for electricity in Tamil nadu and compare it with the existing one.

M : Empirical econometrics.

Ph.D : 1982 : Jan. 1988

R : R. Hema

S : U. Sankar.

163. Economic Analysis of cropping Pattern with Special Reference to land Allocation under Uncertainty.

A : Economics of Uncertainty

O : To develop land allocation model under uncertainty, obtain, condition for ranking crops by riskiness, measure risk aversion parameter and risk premium.

M : Model developed using expected utility framework; Data is farm management data for the years 81-82, 82-83 and 83-84.

Ph.D : April 1983-January 1988.

R : G. Mythili.

S : U. Sankar.

164. Econometric Analysis of Production Decisions of Family farms under uncertainty (ICSSR Project)

A : Agricultural Economics

O : To formulate models to analyse input output decisions under uncertainty; discriminate among alternative theories of choice under uncertainty.

M : Economics of uncertainty, Econometrics.

Gen : December 1986 : May 1988.

R : U. Sankar and G. Mythili.

S : (Ind)

165. Input-output Model for Tamilnadu.

A : Planning

O : To prepare an input output table for Tamil Nadu economy.

M : Input — output approach

Gen : April 1987 : August 1988.

R : U. Sankar, A. M. Nallagounden, P. Duraisamy, U. Aiyasami.

S : U. Sankar (Ind.)

Centre For research on New International Economic Order, Madras

166. Managing the Demand for Petroleum Products in the Road Transport Sector.

A : Transport energy economics.

O : To examine past and present consumption patterns of petroleum products by the Road Transport Sector, arrive at methods of saving energy and maximising fuel efficiency, review

and evaluate government policy and practices in the area of energy conservation and oil substitution, and using recent energy demand forecasts for the 1990 and 2000, attempt made to suggest suitable demand management policies relating to consumption of diesel and petrol.

M : Time series and cross section data on the Petroleum and transport sectors analysed to discern long term trends and changes in these sectors. Case study method using secondary data to analyse transport energy consumption patterns in the movement of passengers and freight in a particular region.

Ph.D : April 1982 : Dec. 1985

R : Koshy M. Cherail

S : K. Rajaratnam.

167. Issues in Foreign Trade of Selected SAARC and ASEAN Countries.

A : International Economics.

O : To study the trends in global trade and selected developing countries during 1961-82; the trends in production, exports and consumption of three selected commodities viz. Tea, Rubber and Palmoil; price movements in nominal and real terms as between producers who are exporters and selected exporters who are not producers; assess the extent of instability in prices of selected commodities and cause thereof and the existing institutional support and international agreements that

influence trade prospects for agricultural products.

M : Instability in prices and export was studied with the help of the model developed by Cuddy and Della Valle. A multiple regression model was specified and estimated to study elasticity of export with respect to selected variables such as production, domestic consumption, export prices, domestic price, price of close substitutes, exchange rate and buffer stocks. On the basis of review of past studies and the scatter diagrams a log model was chosen for the estimable equation and estimated by ordinary least square method for data covering 22 years. All statistical tests were conducted with the help of t and F statistics for five percent and one percent levels of significance.

Ph.D : Jan 1982 : ongoing.

R : V. Jacob John.

S : K. Rajaratnam.

168. Commercial bank finance to weaker sections (with particular reference to Chingleput District)

A : Monetary Economics.

O : To assess impact of bank credit on weaker sections, implementation of various schemes, uses of funds, special emphasis to be laid on the terms of lending under DIR scheme, IRDP and review the achievements of important parameters and pin point the avoidable deficiencies in the process of implementation

with reference to what was envisaged in the formulation of the programme.

M : Case study method.

Ph.D : April 1983 : April 1985

R : S. Subedha

S : K. Rajaratnam.

169. Fulfilment of Basic needs in India

A : Poverty

O : To assess relative importance assigned to the fulfilment of basic needs as compared to other sectors in the five year plan; the pattern of consumer expenditure in India, income wise and the fulfilment of basic needs with reference to selected districts in Tamil Nadu.

M : Intensive study of selected districts of Tamil Nadu, from Primary Data.

Ph.D : April 1983 : completed in 1987.

R : Alamelu Rambhad.

S : K. Rajaratnam.

170. Tribal development in Tamil Nadu since 1950 with special reference to Malayali and Irula Tribes of South Arcot, Salem and Chingleput Dt.

A : Development Economics.

O : To study socio-economic problems of the scheduled tribes in Tamil Nadu, the programmes implemented by the government and voluntary agencies with reference to Tribal sub-plan in

Tamil Nadu, and formulate a new strategy for planning and administration.

M : —

Ph.D : Jan. 1985 : Jan. 1987.

R : N. Sundararaj

S : K. Rajaratnam.

Madras Institute of Development Studies

171. The impact of agricultural growth on the economic condition of weaker sections in Rural Tamil Nadu.

A : Development Economics

O : To examine the defects of agricultural modernisation on the levels of living of different socio — economic groups over the years in rural Tamil Nadu; aims at identifying different socio economic processes which either perpetuate or reduce the incidence of rural poverty in Tamil Nadu.

M : Based mainly on the collection and analysis of field data related to the agro-economic transformation of 2 villages in the Gummidipundi Taluk of Chingleput district, Tamil Nadu.

Ph.D : August 1981 : July 1989

R : V. Chandrasekara Naidu

S : C. T. Kurien

172. The economic impact and Social Implications of the public Distribution System in Tamil Nadu.

A : Development Economics

O : To examine the trends in the procurement operations of the civil supplies corporation, study the interlinkages between the controlled market and the free open market in terms of purchases, distribution, price, institutional arrangements etc. & examine alternative strategies for increasing the public distribution of essential commodities in Tamil Nadu.

M : Analysis of secondary and primary data through statistical and survey methods.

Ph.D : Feb. 1984 : ongoing

R : C. Annadurai

S : C. T. Kurien

173. The Millet Economy of Tamil Nadu.

A : Agricultural Economics

O : To assess the changes in area, yield and production of major millets in the past three decades; understand the purposes of growing millets (home consumption, market, livestock, kind wage payment etc), analyse the price and demand aspects of millets.

M : Time series secondary data and cross section primary data collected from the field survey.

Ph.D : Feb. 1984 : August 1988

R : M. S. Edwin Innocent

S : R. N. Poduval

174. Groundnut Economy of Tamilnadu.

A : Agricultural Economics.

O : To identify and analyse the nature and sources of patterns in growth and instability of groundnut area, yield and production within Tamil Nadu — 1960-61 to 1980-81; identify patterns of growth and instability in groundnut area yield and production across Tamil Nadu & study the factors underlying the different patterns of growth and instability.

M : Identified 8 important groundnut growing districts in Tamil Nadu; to study growth and instability. 5 year moving average and % deviation from this trend analysed; for proximate factors underlying different patterns use a series of decomposition exercises done and for identification of actual factors influencing changes in area and yield supply response analysis used.

Ph.D : June 1985 : June 1989.

R : Asha Krishnakumar

S : A. Vaidyanathan.

175. Factors determining fertilizer use: Its pattern and pace among regions and overtime in South India.

A : Determinants of Fertilizer use.

O : To find out the reasons for the inter-district variations in fertilizer use; study the influence of technological, institutional and economic factors on fertilizer use & the crop wise and farm size fertilizer use.

M : Secondary data to study the factors determining fertilizer use & Primary data. Statistical tools like correlation, regression

linear and log linear growth rates etc used.

Ph.D : January 1986 : January 1989.

R : T. C. Mohanam

S : A. Vaidyanathan.

176. Inter-Regional variations in agricultural growth — a study on Tamil Nadu.

A : Agricultural Economics.

O : Mapping the agricultural growth in Tamil Nadu for the pre and post independent period; analyse the sources of growth, area, yield, cropping pattern and interaction of these factors, find out the impact of demographic factors on agricultural growth and vice-versa; assess the progress of key elements of agricultural technology (especially irrigation HYV and fertiliser) and their impact individually and in combination on agricultural growth; explore the relationship between agrarian structure and organisation on the one hand and agricultural growth on the other and study the role of state policy on agriculture development.

M : The study will rely primarily on secondary sources of information supplemented where appropriate and possible with the findings of previous research on Tamil nadu Agriculture.

Ph.D : April 1986 : ongoing

R : M. Udayakumar

S : A. Vaidyanathan.

177. Bovine Economy of Tamilnadu

A : Agriculture

O : To study the change in the structure and composition of the work animals and their relative importance in the bovine economy, the composition and the efficiency of the milch animal population and their relative importance and assess the impact of state policy on the bovine economy of the state.

M : Related to bovine economy at the state level to the lower levels of administration and the changes seen at the lower levels. Questions that cannot be answered through secondary data will be addressed at the village level.

Ph.D : Feb. 1987 : Feb. 1991.

R : George Mathew

S : A. Vaidyanathan.

178. Structure of brick industry in Tamil Nadu.

A : Structure of brick industries

O : To understand the structure of brick industry ; the relationship between technology, scales of production, market and organisation.

M : Secondary and Primary data to analyse the structure of brick industry and suitable statistical techniques used.

Ph.D : June 1987 : June 1990.

R : E. Manoharan

S : A. Vaidyanathan.

Institute for Financial Management & Research

179. Domestic Resource Constraints and International Capital Markets.

A : International Economics

O : To identify the various sectoral resource constraints of the Indian economy and see if international capital markets can be of some help in getting them released.

M : Qualitative & quantitative assessment of resource-use and resource mobilisation problems on the basis of secondary data.

Gen : August 1986 : July 1989

R : S.V. Bokil

S : (Ind)

Madras Christian College, Tambaram

180. An Analysis of flow of Funds of the Household Sector in the Indian Economy — 1951-52 to 1975-76.

A : Financial Development

O : To study the direction of financial development & the savings of households in financial instruments in the context of flow of funds in the economy.

M : Flow of funds transactions matrix, stepwise regression.

Ph.D : Feb. 1981 : May 1986

R : C. Selvaraj

S : E.S. Srinivasan

181. An Analysis of the NAESEY Scheme in the Madras City.

A : —

O : To study the organisation and functions of the NAESEY scheme in Tamil Nadu, analyse the scheme in Madras city in terms of selected indicators like sales profits etc., find out the problems faced by this scheme and suggest solutions.

M : Survey method/questionnaire & personal interview method.

M.Phil : August 1984 : April 1987

R : D.A.O. Abel Rajan

S : V. Jaishankar

182. Urban Housing — A case study of Madras Metropolitan City.

A : Urban Economics.

O : To highlight the extent and magnitude of urban housing in Madras, the role of public housing & estimation of the gap between requirement and actual supply.

M : Descriptive analysis.

M. Phil : January 1985 : May 1985.

R : Prasanna Kumari

S : Nancy Stella David.

183. Export Performance of the Indian Leather Industry 1950-1980.

A : Industrial Economics

O : To analyse and evaluate the export performance of leather and leather products in India; identify the changes in the dimensions of the value and

quantity of the exports of leather items; examine the causes for the changes in the export trends and variations in the product mix and estimate the future trend of the exports.

M : Ratio method & trend analysis.
M.Phil : August 1985 : 1987.

R : Abraham John

S : V. Jaishankar.

184. Pallavan Transport Corporation : A cost and revenue analysis with Reference to fare revisions 1981-86

A : Transport Economics

O : To examine the cost and revenue position of the Pallavan Transport Corporation between 1981-86, study the impact of fare revision on profit and loss condition & analyse the role of Govt Policy in minimising cost and loss.

M : Published data of PTC and some primary data used. Simple regression and correlation have been worked out for revenue and passengers.

M. Phil : January 1986 August 1986

R : R. Sumathi.

S : Nancy Stella David.

185. Cost and structural pattern of rubber cultivation in Tamilnadu with special reference to Kanyakumari Dt.

A : Agricultural Economics

O : To study cost comparison between private and Govt. Rubber

plantations and make projection of Rubber production in Tamil-Nadu.

M : Primary Data

M. Phil : January 1986 : April 1987

R : E. Dharmaraj

S : Nancy Stella David

186. Changing pattern of female labour participation in agriculture - A case study of Tamil Nadu.

A : —

O : To find out the relations between female labour participation and occupational structure and effect of new technology on female participation; participation rate, sex ratio, literacy rate and caste.

M : Census data of 1971 and 1981 used and District wise variation calculated.

M. Phil : January 1987 : April 1987

R : Cecilia Subashini

S : Nancy Stella David

187. Technology transfer and Industrial Development — A case study

A : Development Economics

O : To find out the nature of technology transfer in selected Indian industries & evaluate the role of policy in Technology transfer.

M : Case Study method

M. Phil : February 1987 : June 1987

R : S. N. Subhashini

S : E. S. Srinivasan

188. Evaluation of the activities of Women's Development Corporation

A : Womens study

O : To examine the objectives and evaluating them

M : —

M. Phil : January 1988 : May 1988

R : Helen Ebenezer

S : Nancy Stella David

189. Growth of Satellite Town in Madras (Tentative)

A : Urban Agglomeration

O : To study the pattern of growth of Madras urban agglomeration, Madras city and its satellite towns, the process of urbanisation in Madras & the role of MMDA in town development of Madras.

M : Percentages and Ratios.

M. Phil : February 1988 : September 1988

R : K. Kesawaram

S : Selvaraj

Stella Maris College, Madras

190. Landless Female Agricultural Labour in Paruthipattu Village (Chingleput Dt)

A : Female Labour Force

O : To study the characteristics of the female labour force in order to identify the causes and extent of discrimination, if any and to assess the productivity and contribution to agricultural income.

M : Survey — questionnaire method

Ph.D : July 1987 : ongoing

S : Sai Thilakam

S : Helen Vincent

191. Economic Viability of Vijayawada Thermal Power Plant

A : Energy Economics

O : To study the financial viability of the Vijayawada thermal power project with regard to productive efficiency and net return, estimate the relationship between input variables on unit generation, examine influence of various projects on net return.

M : Secondary data from A.P. Electricity Board. Multiple regression equations constructed to measure relationship between various input factors and net revenue and impact of fixed and variable cost on electricity generation.

M. Phil : August 1986 : December 1987.

R : M.C. Theresia

S : Chellam Mitran.

192. Occupational Mobility of Engineers

A : Human Resource development

O : To analyse the nature of mobility in relation to demographic and work characteristics of engineers; to trace mobility patterns and predict future mobility patterns & identify and analyse various determinants of occupational mobility among engineers.

M : —

M. Phil : August 1986 : Dec 1987.

R : C. Geetha

S : Merlyn D'Sa

193. A market analysis of two wheelers in Tamil Nadu (1987)

A : Industry

O : To forecast the probable sale of 2 wheelers; study impact of variables on 2 wheeler sales; analyse attitude and opinion of respondents regarding purchase decisions.

M : Included market survey with structured questionnaire—use of regression model—least square method—linear multiple regression—significance test like F & T test used.

M. Phil : August 1986 : Dec. 1987.

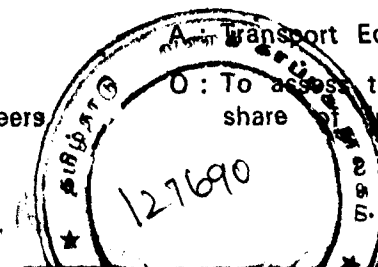
R : S. Madhupriya

S : Chellam Mitran.

194. Share of Indian and foreign shipping in Exports — A case study.

A : Transport Economics

O : To assess the relative market share of Indian and foreign



shipping in the export of iron ore, granite and quartz from Madras port during 1980-81 to 1986-87; examine reasons for the low share of Indian shipping and project the potential share of Indian shipping.

M : Primary and secondary data were used. Used trend method to project prospective shares. Scaling technique was used to analyse causal factors relating to poor performance of Indian shipping.

M.Phil : August 86 : December 1987.

R : B. Uma

S : Merlyn D' Sa

195. Performance of the public sector Vs the private sector — A case study of the Sugar Industry in Tamil Nadu.

A : Industrial Economics

O : To analyse the efficiency and performance of public sector Vs the private sector and assess the desirability from the Indian context.

M : Secondary Data.

M.Phil :—

R : Nandhini Ramaswamy

S : Chellam Mitran.

196. Impact of computerisation on the employment of labour — case study of the computerisation of railway terminals in Southern Railway.

A : Labour Economics.

O : To study the impact of computerisation on the employment of labour, the future potential of absorption of labour with computers in railways; whether computerisation should be introduced in a Govt. sector especially in a labour surplus economy, extent to which computerisation should be carried out especially in the labour intensive railway sectors and the change in the composition of the labour force. An adaptation of the Delphi technique used.

M : —

M.Phil : August 1987 : ongoing

R : Vijayashree, G

S : Helen Vincent

197. Consumer awareness in India.

A : Consumer Economics.

O : To find out consumer awareness relating to ISI products & analyse their preference for ISI products.

M : Questionnaire method & stratified random sampling.

M.Phil : August 1987 : on going

R : T. R. Lalitha

S : Chellam Mitran.

198. Labour welfare Policies — a case study of TTK pharma

A : Labour Economics.

O : To study the importance of the labour welfare policies from the initial stage; bring out the

importance and the need for labour welfare policies in industries & bring out the way in which these policies are adopted in the T.T.K. Pharma.

M : Primary data collected from T.T.K. and some secondary data.

M.Phil :—

R : Premila Ramachandran.

S : Helen Vincent

Carnatak University

199. An analysis of the effectiveness of chemistry curriculum of the polytechnics

A : Educational Technology

O : To determine the extent to which objectives of the polytechnic chemistry curriculum are achieved by the students; judge the relative contribution of each of the clusters of objectives of the curriculum to its total effectiveness.

M : Forty six criterion Referenced Tests, one for each of the curricular objectives along with other instruments were administered to 267 polytechnic students in six phases in 1984-85. The CRT's in particular were administered in three sets with an interval of three months between successive administrations.

Ph.D : 1986 : ongoing

R : D. Brahadeeswaran

S : K. Ramachandrar

200. A study of the attitudes of college students towards self improvement.

A : Educational Psychology

O : To investigate into attitudes toward self improvement which is comprised of physical, mental, emotional, socio-economic, vocational, spiritual and moral aspects.

M : An attitude scale consisting of ten statements on each of the aspects was administered to 1051 college going students. Analysis of variance, correlational analysis, regression analysis and principal component analysis employed to study the attitudes (in the seven aspects) ie. to variables like sex, religion, age, achievement, education, rural-urban status etc.

Ph.D : —

R : Xavier, G. Francis

S : B. C. Patil.

201. The relationship between Cognitive, personality and Biographic variables and preference for Teacher Behaviour of Secondary School Students.

A : Teacher Behaviour

O : To study the relationship between cognitive style of the students and preference for personality variables; personality variables of the students and preference for teacher behaviour, biographic variables and cognitive style of students,

biographic variables and personality variables of students, biographic variable of the students and preference for teacher behaviour.

- M : 894 students were administered group embedded figures test to measure the field dependent-field independent cognitive style of students and the Cattells Jr. Sr. high school personality questionnaire was used to collect data about personality traits of students. The teacher behaviour was observed by the Flanders Interaction Analysis Category System. The preference of the students for teacher behaviour were obtained by asking the students to write down on sheet of paper the names of the teacher.

Ph.D : ongoing

R : Sayed Nurjehan Abubakar

S : G. Shivarudrappa

202. A Study of Psychological and familial Correlates of Juvenile Delinquency in Indian Children.

A : Educational psychology.

- O : To find out the physiological variables that correlate with juvenile delinquency; the familial variables that correlate with it; & develop a method of identifying potential delinquents.

- M : 120, male juvenile delinquents were administered the Ravers Progressive Matrices to measure mental ability, emotional adjustment, social adjustment, educational adjustment and total adjustment, were assessed by Adjustment Inventory for

school students standardised by A. K. P. Sinha and R. P. Singh. Personality factors were measured by Jr. Sr. high school Personality questionnaire adopted by S. D. Kapoor, S. S. Srivatsava G. N. P. Srivastav and K. K. Mehrotra. Eighteen scale of parent child relations are measured by Clark's Parent Child Relations Test.

PhD : ongoing.

R : Kabbur Shivkamar.

S : G. Shivarudrappa.

203. A Critical study of Development of higher Education in the State of Karnataka during six five year plans (1950-1985) with special Reference to Karnatak University.

A : Educational Planning.

- O : To study the development of higher education in Karnatak University, the qualitative development through institutional materials; the improvement of quality of teachers; the problems of examinations and evaluation; evaluate the nature and extent of development with respect to the trends in developed states in the country, & suggest steps for improvement of higher education.

- M : Procurement of annual reports of the Karnatak University right from 1949 to 1985, questionnaire prepared for the entire population of the study was 190 covering 54 university departments and 136 constituent and affiliated schools.

Ph.D : Ongoing.

R : Benal, B.I.

S : G. Shivarudrappa.

204. A Factor Analytical study of some structure of Intellect factor based tests in Kannada for Children of school leaving age.

A : Psychological Testing.

- O : To identify the S-I factors represented by the tests and scoring procedures evolved by the investigator; locate children standing high in the retained tests (or scoring procedures) and arrive at their ability profiles.

- M : Administering the following tests to a sample of about 250 X std children; Ramachandrar's creativity Response Matrices; some tests of Passi's Tests of Creativity, SI factor based tests evolved by the investigator and his associates. Uses and ways tests of creativity evolved by the investigator.

Gen : 1986 : 1988

R : K. Ramachandrar.

S : (Ind.)

205. Evaluation of Teaching—A Multi-Dimensional Approach.

A : Teacher Education

- O : To construct a students rating scale to assess teacher effectiveness; a headmaster's rating scale to assess teacher effectiveness; two forms of an achievement test in a unit in chemistry syllabus of IX std, determine the effectiveness of teachers

by using the technique of performance tests, find out the relationship between students ratings and headmaster ratings of teachers, the relationship between student ratings of teachers and student gain scores (performance test), the relationship between headmaster's ratings of teachers and student gain scores on performance tests & the relationship between teacher behaviour and students gain scores on performance test.

- M : The study will have in part, a pre-test, post test - experimental design with intact groups while determining teacher effectiveness by means of performance test. The second part of the study, involving observational and rating techniques will be correlational in nature.

Gen : Dec. 1987 : Dec. 1989

R : Shashikala Deshpandi

S : (Ind)

EDUCATION

Institute for Social and Economic Change, Bangalore

206. Village Characteristics and Schooling : Case studies of some typical villages in the Balasore district of Orissa.

A : Sociology of Education

- O : To develop a village typology based upon structural indicators of the villages; relate level and quality of schooling across

village types & study the utilisation of educational facilities by the different structural segments of different types of villages.

M : In the first part, secondary data on village characteristics were collected from the census to develop the village types and to relate it with quality and quantity of schooling within 235 sample villages, through primary source by a school survey questionnaire. Second part 700 households were surveyed after selecting 10 typical villages from the village typology to study the utilisation pattern of school facilities by different structural segments.

Ph.D : April 1985 : Ongoing

R : Sitansu Sekhar Jena

S : C.S. Nagaraju

207. Relationship between Education and Modernity : A Case Study in Kerala State.

A : Sociology of Education

O : To study the relationship between Education and Modernity in terms of attitudes ; the relationship between Education and Modernity in terms of behaviour ; the convergence-divergence between attitudes and behaviour of the respondents with respect to modernity and in relation to Education.

M : —

Ph.D : Dec. 1986 : Dec. 1989

R : Sabu K. C.

S : A. S. Seetharamu

208. Meta analysis of Educational Research from the point of view of National priorities.

A : Educational Research

O : Development of criterion framework classification of research reported.

M : Qualitative meta analysis

Gen : 1984 : 1988

R : C S. Nagaraju

S : (Ind.)

209. Studies in the Economics of Indian Education

A : Economics of Education

O : To examine the rationale for educational expenditure in India in the context of developmental levels.

M : Inter-state analysis of time-series data for the period 1956-1981. Data on educational variables, expenditures and developmental variables used.

Gen : Dec. 86 : Dec. 91

R : A. S. Seetharamu

S : (Ind.)

210. Rural schooling - Study of structural and organisational determinants.

A : Equality of opportunity

O : To study development of village typology ; and availability of level of schooling, utilisation of schooling by type of village.

M : Village survey — Resurvey

Gen : April 1987 : April 1989

R : C. S. Nagaraju

S : (Ind.)

University of Kerala

211. Identification of motivational and facilitating factors as well as barriers in the adult education programme with special reference to SC and ST and women in Kerala.

A : Adult Education

O : To identify the factors that help to motivate illiterates and semi-literate to join adult education ; the factors that facilitate the continuous participation of the learners in the adult education programme, the barriers, fault or constraints faced by the learners in making use of the adult education programme and suggest measures for improving its efficiency.

M : Interview with learners, & organisers ; questionnaire cum checklist for instructors, learners, supervisors, organisers, dropouts, non-entrants and members of the household.

Gen : —

R : V. M. Sasikumar, Y. Shahul Hameed

S : K. Sivadasan Pillai

212. Impact of Adult Education programmes in Kerala (1983-84) — An Evaluative Study.

A : Adult Education

O : To study the impact of the AEP on learners (This include achievement and changes in

attitude & behaviour) ; compare the effectiveness of the AEP organised by the university of Kerala through its CAEE and affiliated colleges ; voluntary organisations with special reference to KANF & D, Development Department of Kerala, State A. E. Department and attempt a cost-benefit analysis of the AEP considering the total input.

M : Questionnaire and check list interview ; document study including newspaper reports.

Gen : Nov. 1985 : Nov. 1986

R : V. M. Sasikumar, Y. Shahul Hameed

S : K. Sivadasan Pillai

213. Population education awareness among the college students.

A : Population Education

O : To identify the extent of awareness about population education among the regular college students ; formulate a plan of action for follow up activities on the basis of the study for the implementation of population education programme check list.

M : Survey Method

Gen : Jan. 1987 : June 1987

R : B. Vijayakumar, V. Raghu

S : K. Sivadasan Pillai

214. Awareness of parallel college students in Trivandrum district on population education

A : Population Education

O : To know about the content awareness and necessity to introduce this subject as a discipline in the formal curriculum.

M : Checklist — Survey Method

Gen : Aug. 1987 : Sep. 1987

R : B. Vijayakumar

S : K. Sivadasan Pillai

215. Report of the Field study programme "Nallanalekku of the AIR, Trivandrum Station.

A : Population Education

O : To find out the opinion of listeners on the quality of the programme, the extent of listening the programme, how the programme changed their attitude towards population education.

M : Questionnaire cum checklist designed in Malayalam and administered among the (A&E instructors and KANF&D workers.)

Gen : —

R : V. Raghu
B. Vijayakumar

S : K. Sivadasan Pillai.

Annamalai University

216. A study of creativity in relation to some selected variables.

A : Educational Psychology

O : To assess the creative abilities of the pupils studying in the

classes of IX, X, XII of the Higher secondary schools ; find out the relationship between creativity and demographic variables such as age, sex, birth order and parent's education, occupation : the relationship between creativity and cognitive variables such as scholastic achievement, verbal, intelligence, figural intelligence between creativity and affective variables such as values, anxiety and personality traits and the multiple correlation between creativity, and cognitive affective and demographic variables methodology.

M : The normative research method of study used, proportionate stratified random sampling adopted. 600 subjects chosen for the main study, 't' tests, ANOVA, correlation techniques, multivariate analysis have been used.

Ph. D : March 1984 : Ongoing

R : S. Santhanakrishnan

S : M. Andal.

217. Development of scientific attitude and interests among higher secondary biology students in relation to their learning environment.

A : Science-Education

O : To determine the extent to which scientific attitude and interests are developed among biology students at the higher secondary stage; the relationship between them at their scientific attitude and interests, identify the problems involved in the development of scientific

attitude and interests among them & suggest suitable measures for improvement in the teaching of biology in respect of their attitude and interests.

M : The attitude scale standardised by Karnataka University and the interests inventory standardised by Calicut university for measuring scientific attitude and interests respectively, of the selected sample used.

Ph.D : Feb. 1986 : Feb. 1991

R : N.O. Nellaiappan

S : S. Rajagopalan

218. An Evaluation of value education provided at the secondary stage of education in Tamil Nadu.

A : Curriculum : Education

O : To study the status of seven values such as Theoretical, Economic, Political, Social, Religious, Aesthetic and Moral as possessed by secondary school students ; evaluate the methods and techniques used, make a comparison of the values of students with those of their teachers, find out if there exists any causal relationship between the teacher values and student values on the one hand and the school environment on the other, identify the short-comings, if any, in the present programme of value education & suggest suitable measures for strengthening the value education programme offered in schools.

M : School environment inventory standardised by K.S. Mishra for

measuring the school environment, construction and standardising a students' Value Scale and Teachers' Value Scale & questionnaire to study the methods and techniques adopted in providing value education in schools.

Ph.D : Aug. 1986 : Aug. 1989

R : V. Usha Sri

S : S. Rajagopalan

Madurai Kamaraj University

219. Relevancy of the course of Audio-visual for B.Ed programme to present day educational technology requirements.

A : Educational Technology

O : To find out whether the present Audio-Visual education for the B.Ed programme is sufficient for the requirement of the student teachers of education, identify the gaps if any in the present Audio-visual education programme for the B.Ed & how far the teacher educators make use of the Audio-Visual Aids.

M : —

Ph.D : 1987 : Ongoing

R : S. Dhanasekaran

S : G. Subramania Pillai

220. Contribution of Training towards the development of professional ethics among teachers.

A : Teacher Education

O : To understand the existence and extent of professional ethics

among different groups of teachers, find out the contribution of teacher training for the development of professional ethics among teachers and suggest remedial measures to improve professional ethics among teachers.

M : Curriculum of secondary and B.Ed. training programme

Ph.D : Feb. 1988 : Ongoing

R : W. S. Milton Jeganathan

S : G. Subramania Pillai

221. French Educational Policy in India — 1816-1962

A : History of Education

O : To examine socio-economic conditions of people on the eve of French rule, identify French Educational policy in India & find out its impact on Indian Society.

M : Historical research method

M.Phil : Aug. 1988 : June 1988

R : R. Charles William

S : P. N. Muthiah

222. Kallar Reclamation scheme and its contribution to education.

A : History of Education

O : To find out History of Kallar Reclamation Scheme ; trace contribution of scheme & their administrative set up.

M : Historical analysis

M.Phil : August : April 1988

R : S. Palpandi

S : G. Subramonia Pillai

223. Education values of Medieval sculptures.

A : History of Education

O : The Hindu sculptures of medieval period will be identified and exposition of educational values will be analysed, society will throw light on the values of life and how the morals were taught, and examine the educational values of sculptures & analyse medieval sculptures in the light of educational values.

M : Historical research method

M.Phil : Nov. 1987 : April 1988

R : S. Sukendar

S : P. N. Muthiah

224. Chemistry Education in Autonomous and Affiliated Colleges

A : Chemistry Education

O : To assess and compare the chemistry programmes in affiliated and autonomous colleges in terms of the aspects like type and nature of courses, papers provided, subject matter, consistency, continuity, depth in treatment, interdisiplinary treatment, & uptodateness.

M : Analyses of the curricular documents in terms of the identified criteria will be carried and substantiated by the conduct of interview with the personnel involved.

M.Phil : Feb. 1988 : April 1988

R : V. Mesmin Jayanthi

S : K. Krishnan

225. Educational services of Madura Sowrashttra Sabha : A Historical perspective.

A : History of Education

O : To trace the different forms and types of educational services done by the sabha from time to time, assess the developmental aspects of educational services & identify the problems and hindrances faced by them in their educational services.

M : Documents from the Sabha and analysis by the investigator. Interview will be held with the personnel of the Sabha and related educational institutions by schedule.

M.Phil : Feb. 1988 : July 1988

R : Ramamoorthi S.

S : K. Krishnan

226. Status of oral examination

A : Evaluation

O : To identify the skills necessary for a teacher examiner to conduct oral examination, find out the various levels at which oral examination could be conducted in Higher Secondary for Zoology and make a historical review of oral examination other than India.

M : Questionnaire, content analysis and analytical study.

M.Phil : Feb. 1988 : April 1988

R : M. Rita Louise

S : G. Subramanian

227. Education under the Cholas (850-1279 A.D.).

A : History of Education

O : To analyse socio-economic, cultural and political conditions of the Chola period ; the various aspects of education — types, forms, finance, management, social relevancy etc. and identify the strategies followed which could be of relevance even today.

M : The primary and secondary sources pertinent to the Cholas period from Madras archives, Connemera library, Saraswathi Mahal Library at Tanjore & Tamil University, Tanjore.

M.Phil : Feb. 1988 : April 1988

R : M. Nagarajan

S : K. Krishnan

228. Access to calculation and basic computation skills

A : Educational Technology

O : To find out number of students, faculty members and office assistants who possess the different types of calculators ; find out the purpose for which the calculators are being used by them, to what extent it has helped or hindered the basic computational skills like addition, subtraction, multiplication and division.

M : Explore whether there is any significant difference in any of the aspects between the different sub-groups.

Gen : Sep. 1987 : April 1988

R : G. Subramania Pillay

S : (Ind.)

Mother Teresa University

229. Scientific temper among the school going girls.

A : Science Education

O : To analyse the scientific temper among the school going girls & improve scientific temper among them.

M : Experimental Method

M.Phil : June 87 : June 1988

R : Shobalatha

S : Mary Josephine Louis

230. Developing Non-Sexist Instructional Materials

A : Curriculum

O : To develop non-sexist text books in consultation with the teachers; assess the current status of human values in text books and make specific proposals in evolving alternative statements in the content for the existing sex biased materials.

M : Content Analysis & Seminars

Gen : June 87 : June 1988

R : V. Rajeswari

S : Mary Josephine Louis

231. Eradication of Illiteracy in Kodaikanal

A : Wastage and Stagnation

O : To trace out the number of illiterates in Kodaikanal, give

training to the school volunteers of Kodaikanal to make the illiterates into literates.

M : Interview with the Illiterates.

Gen : June 87 : June 1988

R : K. Nirmala, V. Rajeswari, P. Usharani

S : Mary Josephine Louis

232. Evolving Non Sexist Institutional Materials for Non Formal Education

A : Women Development

O : To identify the sex bias in the text books recommended for NFE, defining the norms and measure the quality of the text books in the light of the norms & suggest possible remedies to improve the standard of instructional materials by carefully studying and analysing the existing learning materials.

M : Combination of exploratory and action oriented study. "Content Analysis" is the technique.

Gen : June 87 : June 88

R : P. Usharani

S : Mary Josephine Louis

233. Making women visible in undergraduate Indian History Curriculum

A : Women & curriculum

O : To identify women personalities who are left out in Indian History; collect detailed account of great women personalities who belong to the particular period & obtain the opinion of

the historians about the inclusion of the identified women in the undergraduate History curriculum.

M : Content analysis of text books and reference books, Interview (oral history method) & collection of Expert opinion.

Gen : June 87 : June 88

R : K. Nirmala

S : Mary Josephine Louis

234. Illiteracy and the drop out problem of the age group (6-35) with special emphasis on girls in Kodaikanal Taluk

A : Wastage & Stagnation

O : To identify the number of illiterates or non-starters in the age group (6-35) in Kodaikanal Taluk, identify the reasons for dropping out of girls & suggest operational strategy for non-formal education to suit the needs and aspiration of these illiterates and dropouts.

M : Exploratory cum action oriented survey, Interview Schedule for family, Headmasters of schools, non-starters, and the dropouts.

Gen : Aug. 1987 : Aug. 1988

R : K. Nirmala, V. Rajeswari, P. Usharani

S : Mary Josephine Louis

University of Madras

235. Case studies of sports schools in Tamil Nadu

A : Physical Education

O : To study in depth the functioning of sports schools in Tamil Nadu & adopt a qualitative ethno-methodology for case study.

M : Case study using both quantitative and qualitative methods.

Gen : Nov. 1987 : July 1988

R : S. Sundararajan

S : P. S. Balasubramanian

236. Educational costing at the primary level.

A : ~

O : To study educational expenses applying cost principles.

M : Content analysis interview; checklist and inventory.

Gen : Nov. 1987 : July 1988

R : Mumtaz Begum

S : P. S. Balasubramanian

HISTORY

Mangalore University

237. The status of women in Tamilnadu from 1000 A.D. to 1600 A.D.

A : Medieval History — Tamilnadu

O : To study the status of women in Tamilnadu from 1000 A.D. to 1600 A.D.

M : Study of the inscriptions and contemporary literacy sources

Ph.D : Aug. 1987 : Ongoing

- R : S. Aravamudham
S : H. V. Srinivasamurthy
238. The political structure of the Deccan under the Rashtrakutas.
A : Early Medieval History — Deccan
O : To study the power and position of the king and the role that the local chief and the local bodies played in this regard.
M : Study of original inscriptions and relevant literary sources.
Ph.D : Oct. 1987 : Ongoing
R : V. S. Elizabeth
S : H. V. Sreenivasamurthy
239. Pandyas of Uchchangi
A : Early Medieval Indian History
O : Intends to bring out the political and cultural contributions of their minor dynasty who served as vassals of the Chalukyas and Hoysalas, on whom no historian of Karnataka has paid the attention they deserve.
M : Study of epigraphic material
M.Phil : Aug. 1987 : Ongoing
R : Ratnavathi P.
S : H.V. Sreenivasa Murthy
- Mysore University**
240. Position of women during Vijayanagara period (1336-1664)
A : South India
O : The contribution of women to socio-cultural development of the period were outstanding, they figured predominantly in all walks of life hence, there is a need for a detailed study.
M : Historical method.
Ph.D : Jan. 1984 : Jan. 1988
R : N. Saraswathi
S : K S. Nanjundappa
241. Political Relations between Mysore and Carnatic, — 1761-99.
A : Political History
O : To find out the political relations between Mysore and Carnatic.
M : Historical method based on the Archival documents.
Ph.D : Jan. 1984 : Jan. 1988
R : C. Thomas
S : A.V. Venkata Ratnam.
242. Social Background of Nationalism of Princely Mysore — 1857-1947
A : South Indian History
O : To elicit the social background of the various social classes of princely Mysore and their response to the nationalist movement of the country.
M : Archival sources
Ph.D : Jan. 1984 : Jan. 1988
R : Aswainarayanan
S : A.V. Venkataratnam

243. Dewans attitude towards freedom movement in Mysore 1926-47
A : South Indian History
O : To find out the role of Dewans' and their attitude in the freedom movement in princely State of Mysore.
M : —
Ph. D. Jan 1985 : ongoing
R : C. Siddaramaiah
S : B. Muddachari.
244. The Administration system of Rashtrakulas.
A : History of South India, during 9th century.
O : To find out the defects and merits of the History of the administration of the Rashtrakulas and give a separate resembled interpretation.
M : —
Ph. D. Dec. 1986 : On going
R : R. Puttaiah
S : Shivanna.
245. Cotton Mills and the colonial State Coimbatore, 1890-1947.
A : Economic History
O : Attempts to explore the colonial policy towards a new industrial sector, namely cotton mills, question of capital formation and problems of the industrial labour.
M : Archival research.
Ph. D May 1986 : Ongoing
R : C. Francis
S : Sebastian Joseph
246. Society and Culture under the Wadiyars of Mysore (1704-1761 A. D)
A : History of Mysore
O : To trace out the socio-cultural conditions of Mysore under the Wadiyars of Mysore (1704-1761 A. D.)
M : —
Ph. D. June 1986 : Ongoing
R : Mahadevi.
S : Muddachari.
247. Urbanisation in Medieval Karnataka: A study of Hoybala Town.
A : History of Karnataka.
O : To give a new emphasis of town, study of the common folk, putting the study in such a way that it should be a new phenomena in our research work.
M : Historical method, by taking into account the inductive method and with the internal criticism.
Ph. D. April 1986 : Ongoing.
R : A. Somashekara.
S : Shivanna.

248. The rule of Haidar Ali and Tipu sultan : An assessment of colonial writings.

A : South Indian History:

O : To decolonize our history, treat regional history in a national perspective and develop a rational and secular attitude in the treatment of historical themes.

M : —

Ph. D. May 1986 : On going

R : Anantharam Gowda T. K.

S : G. R. Rangaswamaiah.

249. Land relations and social structure in Kodagu (1834-1900 A. D)

A : —

O : Intends to carry the work by consulting records and document kept at archives.

M : —

Ph. D. Nov. 1986 : Ongoing

R : K. C. Yathish Kumar

S : Sebastian Joseph

250. The development of Southern Railways (1854-1947)

A : —

O : —

M : —

Ph. D. —

R : S. Rajappan

S : M. V. Srinivas.

Mother Theresa women's University

251. The History of Kallar Tribe

A : —

O : To find origin, history, social political, economic, religious, and cultural histories of Kallar tribe.

M : Primary and secondary sources ; Interview schedule ; oral Interviews.

Gen : July 1986 : Dec. 1987

R : Suryakumari A.

S : (Ind.)

252. Women and superstitions in Tamil Nadu.

A : Historical Studies

O : To find out the popular superstitious beliefs among women ; the influence on the life of women ; whether there is any change in the beliefs and practice due to scientific and educational advancement and suggestions will be made for the medication of these beliefs.

M : Primary and secondary sources & Interview schedule.

Gen : March 1987 : March 1989

R : Suryakumari A.

S : (Ind.)

253. Women stone Breakers

A : —

O : To find out the socio-economic and working conditions, their role in decision making etc and

study the factors that forced them to opt for this tedious work.

M : Personal observation, interview schedule and primary and secondary sources.

Gen : November 1987 : October 1988

R : Suryakumari A.

S : (Ind.)

254. Biographical Dictionary on South Indian Women.

A : —

O : The Dictionary included biographies of women from all walks of life-politics, religion, social education, Journalism, science, law, business etc ; intended to serve as a pleasant reading material and unveil the various contributions of women which are either kept in the dark annals of books of untouchables.

M : Primary and secondary sources ; Direct interviews & interview schedule.

Gen : Nov. 1987 : Nov. 1990

R : Suryakumari A.

S : (Ind.)

255. Women Labourers in Rubber Plantations in Kanyakumari Dt.

A : —

O : To find out the socio-economic conditions, working conditions, their role position ; and status,

whether there is any wage discrimination, their awareness in politics, their rights and responsibilities.

M : Personal observation ; Interview schedule & Primary and Secondary sources.

Gen : January 1988 : December 1988

R : Suryakumari A.

S : (Ind.)

256. Women working in cashewnut factories in Kanyakumari Dt.

A : —

O : To find out their socio-economic working conditions ; role in decision making and household activities & examine whether there is any sex discrimination.

M : Personal observation ; Interview schedule & Primary and Secondary Sources.

Gen : January 1988 : December 1988

R : Suryakumari A.

S : (Ind.)

POLITICAL SCIENCE AND PUBLIC ADMINISTRATION

Andra University P.G. Centre

257. The Scheduled Caste Legislators of Andhra Pradesh Legislative Assembly — Their Problems, Programmes and Attitudes from 1956 to 1976.

A : Political Behaviour

O : To examine the S.C. Legislators in representing the problems of the scheduled castes.

- M : Empirical
Ph.D : February 1976 : ongoing.
R : A. Venkata Rao
S : K. Venkateswarlu
258. Social Change & Political Development in E. Godavari Dt. from 1875 to 1925.
A : Political Development
O : To examine the impact of the social reform movement ; on freedom struggle in East Godavari Dt during the above period.
M : Descriptive & Historical
Ph.D : 1977 : Ongoing
R : Dosagiri Rao
S : Prasanna Kumar
259. Organisation and Methods of the Collector's Office - The Role of the District Collector in Development Activities in the District of E. Godavari.
A : District Administration
O : To examine the effectiveness of Dt. Administration in implementing welfare measures, examine the need for coordination & decentralisation in Dt. Administration.
M : Non participant observation, case studies
Ph.D : December 1981 : Nov. 1987.
R : K. Sitamahalaxmi
S : V.S.K. Haranath
260. Land Reforms
A : Agrarian Reforms
O : To examine the success or failure of land reforms and examine the political motivation in the scheme of agrarian reforms.
M : Case studies
Ph.D : Jan. 1983 : June 1986.
R : Suryanarayana Sastry
S : V.S.K. Haranath
261. Revenue administration in Krishna District.
A : History of Revenue Administration
O : To examine the various changes in the Revenue Administration of Krishna district from the British period to independence
M : Interviews & case studies
Ph.D : Ongoing
R : K. Srinivasamurthy
S : V. S. K. Haranath.
- Kakatiya University**
262. Agrarian movement in Telangana & Agrarian change
A : Sociology of social and Agrarian Movements.
O : To study agrarian movement-structure, dev. & composition, agrarian participation of classes; & agrarian change from below
M : Historical and Comparative
Ph.D : 1984 : 1988
R : K. Srinivasalu
S : K. Seshadri (J. N. U.)

263. Land alienation in tribal areas.
A : Tribal Development.
O : To assess the intensity of the land alienation; examine the effectiveness of land restoration in Tribal areas & project the alternatives to the land problem in Tribal areas.
M : —
Ph.D : 1984 March : Ongoing.
R : B. Janardhan Rao.
S : (Ind)
264. World bank and rural development
A : Rural Development
O : To examine policies and Programme implementation of Rural Development in third world countries and examine the role of the World bank in developing countries.
M : —
Ph.D : December 1984 : ongoing
R : Banda Prakash
S : K. Murali Manohar
265. Employer — Employee relations in Govt. of Andhra Pradesh-A study
A : Personnel management
O : To examine the relation between government and its employees in A. P. since 1956 to 1986 Civil service and in Govt. Employees in A. P.
M : Participatory, observatory method & questionnaires used
Ph.D : June 1987 : ongoing
- R : P. Vaidyanatha Rao
S : Bhaskara Rao.
266. A Biographical study of a political Activist : Ravi Narayana Reddy.
A : —
O : To examine the factors contributing to the effective leadership
M : —
Ph.D : June 1987 : ongoing
R : B. Satyanarayana Reddy
S : B. Venkateswaralu
267. Evaluation of N. T. R. Govt in A. P
A : —
O : Analysis of Public policies of Govt. of A. P. under N. T. R. Govt.
M : —
Gen : Feb 1985 : December 1987
R : V. Baskara Rao
S : (Ind)
268. Student Political culture — A case study of Kakatiya University students.
A : Political Culture
O : To know the levels of political culture among the P.G. Students, and know the relationship between socio economic background and ideological learning.
M : Survey Method
Gen : 1985-87
R : K. Raghuram Reddy
S : (Ind)

269. Women workers in unorganised sector - A study of tanning Industry.
 A : Public Administration
 O : To know the socio economic status along with domestic situation ; study the working conditions, wage structure, nature of work & the movements & their participation in strikes.
 M : —
 Gen : May 1986 : May 1988
 R : —
 S : Kakatiya University
270. Indian foreign policy with special reference to Indo-Srilanka relations in the context of Tamil Problem Since 1977-85.
 A : Foreign Policy
 O : To study crisis of the Tamil's in Srilanka ; India's role in solving the crises & Srilankan attitude towards the problem.
 M : Descriptive and comprehensive and chronological analysis.
 Gen : July 1987 : July 1989.
 R : K. Asaiah
 S : (Ind.)
271. Field Investigators and social science research in India.
 A : Personnel Management & Industrial Relations.
 O : To find out the job content and job context factors of the social science Field Investigators ; analyse their morale and commitment of the field investigators in the S. S. Research Institutions.
 M : Questionnaire and Interviews
 Gen : Nov. 1987 : ongoing
 R : R. Raghuram Reddy
 S : (Ind).
272. Present women and Development
 A : Women's Studies
 O : To examine the role of present women in rural development ; assess the kind of exploitation on rural women levels ; of degradation and the causes & examine the impact of development and their response to exploitation.
 M : Field — based study
 Gen : October 1987 : September 1988.
 R : E. Revathi, Rajalaxmi, Rajamani, Ramesh.
 S : K. Murali Manohar.
- Nagarjuna University**
273. Organization and political parties —
 A study of party organisation at district level.
 A : Organisational behaviour
 O : To measure the social characteristics of the party leaders in terms of their ideology & measure the goal and role orientation of party activities.
 M : Empirical Study — questionnaire used.
 Ph.D : December 1985 : ongoing
 R : G. Satya Mani
 S : C. V. Raghavulu

274. Tamil problem in Srilanka.
 A : International Relations
 O : To evaluate the problems of Tamils as a ethnic group and demand for seperation and autonomy.
 M : Interviews & narrative method used.
 M.Phil : 1985 : 1987
 R : Jayaram Naidu.
 S : C. Narayana
275. Rural development bureaucracy : A study of values.
 A : Bureaucracy
 O : To study the socio economic background & bureaucracy engaged in rural development ; examine the behavioural attitudes, perceptions and orientations of these bureaucrats and assess the role of the values in the role performance of these bureaucrats.
 M : Empirical study based on questionnaire, interview and observation methods.
 M.Phil : Jan. 1986 : ongoing
 R : B. Rama Rao
 S : M. Bapuji
276. Organisation and politics of trade unions : A study at local level.
 A : Political movements and organisation.
 O : —
 M : —
- M.Phil : May 1987 : Ongoing
 R : K. S. Lakshmana Rao
 S : K. C. Suri
277. Civic leadership in Guntur.
 A : Urban Affairs
 O : To study who are the civic leaders ; do they belong to majority communities, find out the result of new political development
 M : Field-work
 M.Phil : —
 R : J. Venkata Rao
 S : N. Ashirvad
278. Urban leadership in Vijayawada Municipal Corporation.
 A : Urban Affairs
 O : To study who are the municipal corporation leaders of Vijayawada ; their socio-religious, economic background & their style of functions & achievements.
 M : Field-work
 M.Phil : —
 R : E. Syam Prasad
 S : N. Ashirvad
- Karnatak University**
279. Translation of the book "The Buddha and his Dharma" from English to Kannada by Dr. B. R. Ambedkar.

- A : Dr. B. R. Ambedkar Studies
 O : Translation from English to Kannada.
 M : Translation
 Gen : April 1984 : ongoing
 R : V. S. Patil
 S : A. M. Rajasekhariah
280. N. S. Hardikar : A study of his contribution to the Indian National Movement.
 A : Indian Political Thought
 O : To trace his role and contribution to the Indian National Movement.
 M : Historic
 Gen : 1985 : ongoing
 R : S. Y. Gubbannara
 S : (Ind)
281. Recent theories of administration and management.
 A : Administration, Management
 O : To integrate the behavioural approach, the sociological approach and the decision making approach; the implications of the revolution ushered in by electronics, computerisation and the internationalisation of administration and management.
 M : Documentary method and the method of structured and unstructured interviews with respondents.
 Gen : March 1985 : March 1986
- R : R. T. Jangam
 S : (Ind)
282. Jawaharlal Nehru and the office of Prime-Minister : Indian Politics State waft and World order : A study in leadership dimension.
 A : Mahatma Gandhi and Nehru Studies.
 O : To identify Jawaharlal Nehru's unique and distinctive contribution to Indian society & demonstrate Nehru's role as a world leader.
 M : Ten hypotheses identified and the analyses will be within framework. The technique of developmental biography adopted.
 Gen : April 1986 : April 1988
 R : V. T. Patil
 S : (Ind)
- Institute for social and Economic Change**
283. Politics and development with reference to rural development programmes in Andhra Pradesh.
 A : Indian Politics
 O : To examine the organizational set up of political institutions associated with rural development, study the nature of leadership & analyse resources generated by implementing programmes and their constraints.
 M : Primary and secondary data, Primary data is by administering schedules to beneficiaries and new beneficiaries of the programme.

- Ph.D : June 1985 : December 1989.
 R : Suvarchaloo. G
 S : S. N. Sangitha.
284. The human organization at work : A case study of primary health centres in Andhra Pradesh.
 A : Organizational Behaviour in Health services Administration.
 O : To understand whether the human relations perspective is a built-in feature of the primary health centre organisation, whether the determinants of a human relation climate fall within the purview of the formal organisation or are there any factors external to it & see whether there is any relationship between the HR. climate that is existing, and morale and motivation of the employees.
 M : A case study method with the tools being an interview schedule and observation combined with an elaborate interview.
 Ph.D : June 1986 : ongoing
 R : K. Sasi Kala
 S : Amal Roy.
285. Changing pattern of political leadership in Karnataka.
 A : Karnataka Politics.
 O : To explore the changing nature of political leadership in Karnataka during the last four decades; relate this change to caste and sub-regional context; Identify the nature of demands of the new leaders and the extent of their manifestation in public policy decisions in development; our hypothesis being that changing leadership pattern is a case of party development from polarised to moderate pluralism has led to better focussing in the public policies and programmes of demands and non-dominant sub-regional groups.
 M : About the case; sub-regional backgrounds of Leadership Demands of newly mobilized caste and sub-Regional groups and their Actualisation from both primary-interviews, Govt. documents on development and secondary sources & party records, legislature Documents and newspaper reports to test the hypotheses.
 Ph.D : June 1987 : ongoing
 R : L. R. Raghavendra Rao
 S : Amal Roy.
- University of Kerala**
286. Voting behaviour in Kanyakumari District.— A study.
 A : Political Behaviour.
 O : To identify the Vote-turn out, preferences, apathy etc., analyse the impact of propaganda and media; political culture & political socialisation from the micro point of view.
 M : Empirical study based on sampling and application of questionnaire method & survey Research.
 Ph.D : 1984 : August 1987

R : P. S. Vijayanatharaj

S : G. Gopakumar.

Madurai Kamaraj University

287. District Police Administration with special reference to Madurai District.

A : Public Administration

O : To study in detail the tasks that are actually performed by police at district level, find out whether the existing structure of police at district level is suitable or any changes are necessary & how should different level of management be inter-related to perform the total task of police organisation.

M : —

Ph.D : April 1987 : ongoing

R : P. Palanichamy

S : K. Pandurangan

288. Police-Public relations with special reference to Usilampatti circle.

A : Public Administration

O : To examine the nature of relationship that exist between the police and the public in Usilampatti circle; examine the manner and extent to which police can enlist ready and willing co-operation of the public in the discharge of their law enforcement duties & suggest measures regarding the institutional arrangements to secure such cooperation and measures for the growth of healthy and friendly Police-Public relationship

M : Social Survey method

M.Phil : January 1986 : July 1987

R : O. Chandrasekaran

S : K. Pandurangan

289. An analytical study about the president of India with special references to his powers.

A : Government and Politics of India

O : To analyse in detail the legislative, executive judicial, financial and emergency powers of the President and the position he enjoys as the head of the state.

M : Analytical Method

M.Phil : December 1986 : October 1987

R : P. Singaraj

S : S. Subramanian

290. The role of police station in Law and order Administration with special reference to Andipatti police station.

A : Public Administration

O : To study the existing organisational structure of the Police station in maintaining law and order from the point of view of the police and the public in Andipatti police station and suggest measures regarding the institutional arrangements that are necessary to ensure that the police station functions in the way the law requires and the people expect it to do.

M : Social survey method.

M.Phil : Jan 1987 Sep. 1987

R : P. Ravichandran

S : K. Pandurangan

291. The role of Polices Boys' Clubs with special reference to Madurai city.

A : Public Administration

O : To find out whether the Police Boys' Clubs are able to fulfil the objectives for which they were established & suggest measures to make the Boys' clubs more meaningful.

M : Social Survey Method

M.Phil : January 1987 : October 1987

R : R. Vetrivelmurugan

S : K. Pandurangan

PSYCHOLOGY

Bangalore University

292. Small group interaction and social acceptance among Preadolescents

A : Counseling psychology

O : To design and evaluate programmes which promote social development; compare the effects of programmes based on the transactional analysis and social skills practice on social acceptance and related behaviour.

M : The study was designed to evaluate the effect of two types of structured small group inter programmes on social acceptance

among Preadolescents. From among 1750 pupils in 8 higher primary schools 500 students were selected for the study on the basis of their sociometric nominations. The subjects were identified as belonging to one of the four sociometric groups namely the accepted, the re-rejectees, the isolates and the mixers.

Ph.D : 1980-87

R : Y. Achalakumari,

S : M. S. Thimmappa

293. Work role quality and attitude towards retirement of midlife men and women.

A : Psychology of Aging

O : To study the quality of paid workers role and its influence on attitude towards retirement, the influence of sex, age, education, income, and type of occupation of the person on attitude towards retirement.

M : 170 men and women, 100 male 70 female from different occupations like industry, banking, teaching, and government employment, in the age range of 45 to 58 years constituted the sample. Those in 45-51 year range were considered to be in the remote phase and 52-58 years as near phase of retirement. An information schedule, Role quality scale to measure rewarding or distressing aspects and attitudes toward retirement scale were used.

M.Phil : Februray 1987 : December 1987.

R : Ms. Audrey Pinto
S : Indira Jai Prakash

SOCIAL WORK

Gandhigram rural University

294. Social legislation and changes among agricultural labourers.

- A : Legal social work — socio-legal aspect.
- O : To examine the changes effected by the minimum wages Act and the Protection of civil rights act among the agricultural labourers through the intervention of a voluntary organisation & mainly concentrates on the following specific variables ; knowledge of labourers on the specific provisions, agreement of labourers on these provisions, perception of labourers about the programmes of a voluntary organisation, organised efforts of labourers, changes in the living and working conditions of agricultural labourers and the involvement of a voluntary organisation in the process of change.

M : Survey design is followed, particularly, post — facto design, purposive sampling to select the villages & stratified random sampling to select the respondents.

Ph.D : Feb. 1987 : October 1998

R : P. N. Narayana Raja
S : A. M. Sarma

295. The practice of Micro Level Planning

- A : Micro Level Planning
- O : To study about the planning process at the micro level.
- M : Case-study Methodology
M.Phil : Dec. 1986: May 1987
- R : S. Rangasamy
S : N. Manandan

Madras School of Social Work

296. Study of grant-in-aid to institutions for the handicapped in Tamil Nadu.

- A : Welfare of the handicapped.
- O : To ascertain beneficiaries' satisfaction with the services provided, and their difficulties in utilizing the same & suggestions of management and staff for the improvement of the grant-in-aid programme.
- M : About 600 respondents from over 30 institutions in different parts of Tamil Nadu interviewed using structured, pretested interview schedules.
Gen : 1987-88

R : P. K. Visveswaran & others
S : Sponsored by the Union Ministry Of Welfare.

297. Problems of women and child workers in Beedi industry.

- A : Welfare of women and children.
- O : To find out how working conditions including wages differ from state to state; whether workers are organised and, if so with what results; hazards and problems, and workers knowledge of statutory rights.

- M : About 900 beedi workers from Tamil Nadu, Karnataka and Kerala interviewed using pretested and structured interview schedules. A few officials, employers and middlemen also interviewed.
Gen : 1987-1988

R : C. S. Benjamin & others
S : Sponsored by Union Ministry Of Welfare.

the required data from the employers; case studies will be conducted to highlight their problems;

Gen : 1987 : 1988

R : D. Varadharajan & others

S : Sponsored by Union Ministry Of Welfare.

SOCIOLOGY

Andhra University

299. Professional role and role performance of the doctors — A sociological study.

- A : Medical Sociology
- O : To study the self role perception, role commitment and the actual Role performance of doctors in State Govt. General hospitals; the role expectations and the nature of their interaction and communication with their role — set members; and analyse the relationship between all these factors in relation to the role performance of doctors.

M : Three teaching—cum—general hospitals in the state of Andhra Pradesh namely; the King George Hospital in Visakkapatnam; The Osmania Hospital in Hyderabad and S. V. R. R. Hospital in Tirupathy were selected & 300 doctors of various cadres, 300 nurses and 300 patients from the above hospitals were selected. 3 separate interview schedules, were prepared, from them. Tabulation procedures and

298. Problems of women engaged in domestic work in the States of Tamil Nadu, Karnataka and Kerala.

- A : Social welfare
- O : To study the social and economic characteristics of the women engaged in Domestic work; their living and working conditions, expenditure pattern; the protective measures available if any; the discrimination between men and women in the domestic sphere & exploitation of women workers; assess the contribution of the domestic sector in the income and employment generation in the city—town economy; portray the economic and non-economic characteristics of this sector, labour market behaviour of the sector etc & explore the possibilities of extending the non-formal education facilities to these women.
- M : Variables used : location demographic factors, employment history, present employment, working conditions in the present employment, protective measures and living conditions used in the study. A structured interview schedule used to collect

also suitable statistical techniques used.

D.Litt: November 1985 :
November 1988.

R : E. Suryamani

S : K. Radha Krishnamurthy

300. Social Ecology and social area analysis of Visakapatnam city.

A : Urban Sociology.

O : To study the relationship between locality, ethnicity, caste & class, analyse the process of migration, intra-city mobility, rural urban interaction, social mobility and the relationship between social ecology, culture and demographic behaviours.

M : Eight areas, two upper class, four slums and two sub-urban areas each from industrial and non-industrial zones of the city selected and around 100 households from each of the 8 localities are covered. Out of the 833 households 338 are migrant households which were interviewed for migration, for demographic data, 50% each from migrant and non-migrant households have been covered.

Gen : December 1985 : March 1988.

R : K. Ranga Rao & V. Tataji

S : (Ind)

Institute for Social & Economic change, Bangalore

301. Rural poverty—A Sociological study of the rural poor: A case study of an Indian village.

A : Rural Sociology

S : To examine the problems of rural poverty in sociological terms and examine the concept of culture of poverty in the Indian Rural context.

M : Case studies and participant observation.

Gen : September 1986 : March 1988.

R : V. S. Parthasarathy

S : (Ind)

302. A study of Professional Socialisation of woman Medical and Nursing Students in a Medical College.

A : Medical Sociology

O : To find out whether women Medical and Nursing Students have idealism; whether Medical and Nursing students have role models among their teachers & if culture interferes with professional socialisation.

M : Participant observation combined with personal interview using an interview schedule.

Ph.D : July 1979 : January 1987

R : M. R. Annapoorani

S : R. Venkataratnam

Madurai Kamaraj University

303. Subjective Understanding of Law as a profession by the Law students.

A : Sociology of Professions

O : To understand the status of law from the student's perspectives & analyse the socio-

economic background of law students.

M : Descriptive and analytical study based on qualitative and quantitative techniques.

M. Phil : July 1987 : July 1988

R : R. Sreedhar

S : L. Thara Bhai

304. A subjective understanding of Engineers as a Profession—Private Engineers.

A : Sociology of professions and occupations

O : To understand the status of Engineers from the perspective of Private employees & analyse the socio-economic background of the Engineers.

M : A Descriptive and analytical study—using qualitative and quantitative techniques & Interview schedules used.

M. Phil : July 1987 : June 1988

R : M. S. Ramani

S : S. Gokulavani

305. A subjective understanding of Legal Profession by the law students.

A : Sociology of Professions and Occupations

O : To understand the status of Legal profession according to Law students; and analyse the ranking of Professions as understood by students of law

M : Exploratory study and using of qualitative and quantitative techniques & Interview schedules

M.Phil. July 1987 : June 1988.

R : Sekar

S : S. Gokulavani

306. A subjective understanding of the Engineering profession by the Engineers.

A : Sociology of profession

O : To understand the status of Engineering according to Engineers, analyse the ranking of professions as understood by Engineers.

M : Exploratory, descriptive study using both qualitative and quantitative tools.

M. Phil : June 1987 : June 1988

R : Chelliah

S : R. Kannan

307. A subjective understanding of Pharmacy as a profession by the pharmacy students.

A : Sociology of Profession

O : To understand the status of pharmacy from the students (pharmacy) perspective & analyse the socio-economic background of the Pharmacy students.

M : Descriptive and analytical study employing both qualitative and quantitative techniques.

M. Phil : July 1987 : June 1988.

R : Kamatchi

S : Kannan.

**Madurai Kamaraj University P. G
Extension Centre**

308. A study of system of communication in an industrial organisation

A : Sociology of Organisations

O : To study the processes of downward and upward communication and the channels involved therein and to identify the pattern of communication network in the organization:

M : Interview of the personnel in the management cadre and of a sample of the workmen-structured and unstructured interviews

M. Phil : Ongoing

R : K. Chinnadurai

S : C. N. Natarajan

309. A study of Administrative Leadership in an Educational Institution.

A : Sociology of Organisation

O : To examine the style of the administrative leadership and its impact on the working of the institution.

M : Questionnaires to be administered to the Head of the Institution, the Heads of Departments and the subordinate teaching staff.

M. Phil : Ongoing

R : S. Madankumar

S : C. N. Natarajan

310. An analysis of system of Training in a Hospital.

A : Sociology of organisation

O : To study the organisation of training in the hospital and examine the impact of training on the role perception and performance of employees.

M : Interview and administration of questionnaires to a selected sample of the employees.

M. Phil : Ongoing

R : Mahalakshmi

S : C. N. Natarajan

311. A study of system of Discipline in a Transport Corporation.

A : Sociology of Organisations.

O : To study the nature of disciplinary problems in the organisation and the means and methods adopted to deal with them.

M : Interview of the administrative authorities incharge of discipline and of the crew through schedules.

M. Phil : Ongoing

R : S. Nagappan

S : C. N. Natarajan

Mother Teresa Women's University

312. T. V and its impact on socialisation among adolescent girls

A : —

O : To identify the sex bias in T. V. programmes; study the influence of the roles of women on adolescent girls.

M : Survey method and content analysis.

M. Phil : May 1987 : June 1988

R : M. Valarmathi

S : Rethi Devi

313. A study on the status of women in Kodaikanal.

A : —

O : To study the educational and employment status of women

in Kodai; identify the specific sicknesses among women; understand the political and legal status of women.

M : Census interview method adopted

Gen : June 1987 : May 1988

R : Ani Lukose, Nagalekshmi

S : (Ind)

PART II

Specialisations

Area of Specialisation	Centre
Agriculture	
Agricultural Economics	— Institute for social and Economic change Bangalore
	— Madras Institute of Development studies.
Anthropology	
Physical Anthropology	— Karnatak University
Social Anthropology	— Karnatak University
Commerce and Business Administration	
Accounting	— Cochin University
Financial Management	— Kakatiya University — Madurai Kamaraj University — IFMR, Madras.
Institutional Finance	— Kakatiya University
Industrial Relations	— Madurai Kamaraj University
Marketing	— Cochin University — Kakatiya University

Area of Specialisation	Centre
Demography	
Community Health	— S. V. U. College, Tirupathi
Economic Demography	"
Fertility	"
Health	"
Tribal Demography	"
Economics	
Agricultural Economics	— S. V. U. P. G. Centre, Kavali — Gulbarga University — Bangalore University — University of Kerala — Bharathidasan University — ISEC, Bangalore — MIDS, Madras — Madras Christian College, Tambaram
Development Economics	— Andhra University — S.V.U.G. Centre, Kavali — Gulbarga University — Bharathidasan University — ISEC, Bangalore — MIDS, Madras — Madras Christian College, Tambaram
Econometrics	— University of Madras
Environmental Economics	— ISEC, Bangalore — Andhra University
International Economics	— University of Kerala — ISEC, Bangalore — CRNIEO, Madras
Industrial Economics	— Gulbarga University

Area of Specialisation	Centre
Labour Economics	— University of Kerala — Bangalore University — ISEC, Bangalore
Public Finance	— S.V.U. PG Centre, Kavali — University of Kerala — ISEC, Bangalore
Political Economy	— Bharathidasan University — MIDS, Madras
Rural Economics	— Andhra University — ISEC, Bangalore — MIDS, Madras
Urban Economics	— MIDS, Madras
Women's Studies	— MIDS, Madras — Madras Christian College, Tamabaram — Stella Maris College, Madras.
Education	
Adult Education	— University of Kerala — Madurai Kamaraj University
Curriculum Development	— Annamalai University — Madurai University
Creative Thinking	— Madurai Kamaraj University
Educational Management	— Madurai Kamaraj University — University of Madras
Educational Psychology	— Madurai Kamaraj University
Educational Technology	— Karnatak University — Madurai Kamaraj University
Research Methodology	— Karnatak University — University of Kerala
Teacher Education	— Karnatak University — University of Madras
Women's Studies	— Mother Teresa University, Kodaikanal
History	
Ancient History	— Mangalore University
Medieval History	— Mangalore University
Indian History	— Mother Teresa University.

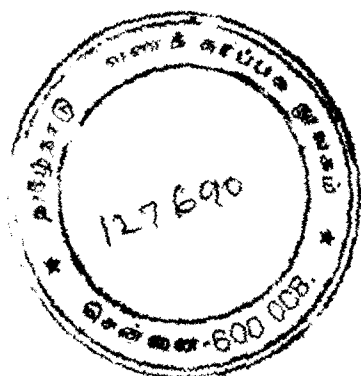
Area of Specialisation	Centre
Political Science and Public Administration	
Constitution & Governments	— Andhra University
Comparative Politics	— Karnatak University — University of Kerala
Development Administration	— Kakatiya University — Nagarjuna University
Disaster Management	— Nagarjuna University
Gandhian Thought	— Karnatak University
Foreign Policy of India	— Karnatak University
Indian Political system	— Karnatak University — University of Kerala
International Relations	— Karnatak University — Nagarjuna University — University of Kerala
Urban Administration	— Kakatiya University — Nagarjuna University
Public Administration	— Karnatak University — Madurai Kamaraj University
Political Economy	— Kakatiya University
Political Theory	— Kakatiya University — Karnatak University
Political Sociology	— Karnatak University
Psychology	
Clinical Psychology	— Bangalore University
Counseling	— Bangalore University
Industrial Psychology	— Bangalore University
Social Work	
Social Work	— Madras school of Social Work — Madurai Institute of social work.

Area of Specialisation	Centre
Sociology	
Criminology	— Andhra University
Organisational behaviour	— Andhra University
Political Sociology	— Andhra University
Rural sociology	— Andhra University — ISEC, Bangalore
Social Change	— Andhra University
Social Demography	— Andhra University
Social statistics	— Andhra University
Social Theory	— Andhra University
Urban Sociology	— Andhra University

APPENDIX

1. Andhra University
Waltair-530 003
Andhra Pradesh
2. Andhra University Post-
Graduate Extension Centre
Kakinada-533 001
Andhra Pradesh
3. Kakatiya University
Warangal-506 009
Andhra Pradesh
4. Nagarjuna University
Nagarjunasagar 522 510
Andhra Pradesh Guntur Dt
5. Sri Venkateswara University
Tirupati-517 502
Andhra Pradesh
6. Sri Venkateswara University
P. G. Centre
Kavali-524 202
Andhra Pradesh
7. Bangalore University
Jnana Bharathi
Bangalore-560 056
Karnataka
8. Gulbarga University
Jnana Ganga
Gulbarga-585 105
9. Karnatak University
Pavate Nagar,
Dharwad-580 003
Karnataka
10. Mangalore University
Mangalagangothri-574 152
Mangalore D. K.
Karnataka
11. University of Mysore
Manasa Gangotri
Mysore-570 006
Karnataka
12. Institute for Social &
Economic Change,
Nagarbhavi P. O.
Bangalore-560 072
13. Cochin University of
Science & Technology
Dept. of Applied Economics
Cochin - 682 022
Kerala state
14. University of Kerala
Kariavattom P. O.
Trivandrum-695 581
Kerala State
15. Annamalai University
Annamalai Nagar-608 002
Tamil Nadu
16. Bharathidasan University
Tiruchirapalli-620 003
Tamil Nadu
17. Gandigram Rural University
Gandhigram-624 302
Anna Dist
Tamil Nadu
18. Madurai-Kamaraj University
Palkalai Nagar
Madurai-625 021
Tamil Nadu

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|---|--|
| 19. Madurai-Kamaraj University
P. G. Extension centre
Palalamkottai-627 002
Tamil Nadu | 24. Madras Institute of
Development Studies
79, Second Main Road,
Gandhi Nagar, Adyar
Madras-600 020 |
| 20. Mother Teresa Women's University
Kodaikanal-624 102
Tamil Nadu | 25. Madurai Institute of Social work
Alagarkoil Road.
Madurai-625 002
Tamil Nadu |
| 21. University of Madras
Dept. of Econometrics
Chepauk, Madras-600 005 | 26. Tribal Research Centre
Tamil University,
M. palada P. O.
Fern Hill-643 004
Tamil Nadu |
| 22. Centre for Research on
New International Economic
order
1, First Street, Haddows Road,
Madras-600 006 | 27. The Madras School of Social work
32, Case Major Road, Egmore
Madras-600 008 |
| 23. Institute of Financial Management
and Research,
No. 30, Kothari Road,
Nungambakkam, Madras-600 034 | 28. Madras Christian College
Dept. of economics, Tambaram
Madras-600 059 |
| | 29. Stella Maris College,
17, Cathedral Road,
Madras-600 086. |



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