

## CHAPTER 8

# AGRICULTURE AND RURAL DEVELOPMENT

## 8.1 AGRICULTURE

### Introduction

The year 2002-03 witnessed a setback in agriculture and GDP growth declined to 3.2 per cent as compared to 5.7 per cent growth in 2001-02 due to severe drought conditions in several States. The total food grains production was 182.57 million tonnes in 2002-03 against 212 million tonnes in 2001-02. Similarly, oilseeds production estimated at 15.75 million tonnes suffered a decline of over 24 percent or about 5 million tonnes over the level of 2001-02. The production of other commercial crops such as cotton, jute and sugarcane also witnessed significant fall during 2002-03. Production performance of individual crops during 2001-02 and 2002-03 is given in Annexure 8.1.

2. Considering the widespread rainfall so far and likelihood of normal monsoon during 2003-04, it is anticipated that recovery of farm output would trigger a high growth rate not only in the GDP originating from agriculture and allied activities but also in the overall GDP during 2003-04.

3. To help realize the high expectations of growth of agricultural output, not only in the current year but also the coming years, the 10<sup>th</sup> Plan had identified a number of thrust areas. A number of schemes / programmes covering these thrust areas have been formulated and are being implemented by the Department of Agriculture and Cooperation, Department of Agricultural Research and Education and the Ministry of Commerce and Industry.

4. A brief account of the schemes / programmes of the 10<sup>th</sup> Plan, their performance during the Annual Plan 2002-03 and the highlights of the Annual Plan 2003-04 is given below:

### Review of Annual Plan 2002-03 and Annual Plan 2003-04

#### Technology Mission on Oilseeds, Pulses, Maize and Oil Palm

5. The Technology Mission on Oilseeds, Pulses, Maize and Oil palm has been restructured and is being implemented during the Tenth Plan with three schemes viz. Integrated scheme of Oilseeds, Pulses, Oil palm and Maize (ISOPOM), Post Harvest Technology on Oilseeds, Pulses and Maize and Tree Borne Oilseeds. The basic aim is to increase production of oilseeds, pulses and maize and their products through infusion of better technology. The scheme of Tree-borne Oilseeds is being taken up for increasing collection of tree-borne oilseeds as well as expanding the production base of these non-traditional oil sources. Under the ISOPOM scheme, the sharing pattern of the Central and State expenditure is 75:25. The implementation of Integrated

scheme of ISOPOM will be limited to 14 States for oilseeds and pulses and 15 states for maize so as to concentrate resources to the major oilseeds, pulses and maize producing States and to provide the desired thrust to this programme. The scheme of Oil palm is being implemented in 11 States. An outlay of Rs. 1069.15 crore has been proposed under the Tenth Plan, of which Central share is Rs. 835 crore. The Central share of outlay for the ISOPOM scheme for the year 2002-03 is Rs. 146.20 crore.

### **Technology Mission on Cotton**

6. Technology Mission on Cotton was started from February, 2000. The main aim of the Mission is to increase the production and improve the quality of cotton. The Mission consists of four Mini Missions viz. Mini Mission I, II, III and IV, devoted respectively to technology generation, transfer of technology, improvement of market infrastructure and modernization of ginning and pressing (G&P) factories. MM-I and MM-IV are being funded by Government of India to the extent of 100 per cent. MM-III which is being implemented by the Ministry of Textiles, will be financed by Government of India to the extent of about 58 per cent. MM-II is shared by GOI and States on 75:25 basis. The MM-II is being implemented by Department of Agriculture and Cooperation in 13 States viz. Andhra Pradesh, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal and Tripura. Outlay proposed for this Mission during 2002-03 was Rs. 20 crore out of which Rs. 12.09 crore has been spent. Outlay proposed for 2003-04 is Rs. 38 crore.

### **Agricultural inputs and services**

#### **Seeds**

7. The availability of seeds, which is a critical and basic input in attaining the higher productivity level, has increased substantially in the country over the years. The availability of certified / quality seeds at 114.0 lakh quintals during 2001-02 was higher than the projected requirement of only 92.7 lakh quintals. During 2002-03 also the availability of certified / quality seeds remained higher as compared to the estimated requirement, except for some crops/ varieties. However, against the target of 112 lakh quintals distribution of only 95 quintals of certified / quality seeds could be achieved. Nevertheless, it was higher than the quantity of 91 lakh quintals distributed during 2001-02. For 2003-04, the target for distribution of certified / quality seeds has been fixed at 117 lakh quintals, vis-a-vis target of 149.6 lakh quintals for the terminal year of Tenth Plan (2006-07). Although the overall availability of certified / quality seeds has improved, the Seed Replacement Rate (SRR) in case of several crops, especially the pulses and some oilseeds, has remained much below the recommended levels.

8. The 'Seed Bank' scheme started during Ninth Plan has proved to be useful in meeting the requirement of seeds in case of exigencies, like droughts and floods. During 2002-03, 1,24,483 quintals of seeds of various crops / varieties were maintained by the National Seeds Corporation of India (NSC), State Farm Corporation of India (SFCI) and 13 participating States Seed Corporations in the Seed Bank. An amount of Rs.699.99 lakh was released to the Seed Corporations for maintaining the Seed Bank, construction of stores and computerization. Of the seeds maintained in the Seed Bank, 65,424 quintals were distributed to the drought affected

farmers. For the year 2003-04, a physical target of 1,40,300 quintals of certified seeds, (including 11,000 quintals for NE States) and 8,370 quintals of foundation seeds of various crops has been fixed for the Seed Bank.

9. The National Seed Research and Training Centre (NSRTC) being set up at Varanasi, would impart training to personnel working in various seed development organizations. The proposed Seed Testing Laboratory at Varanasi would also act as Central Seed Testing Laboratory as required under the Seeds Act, 1966.

10. At present, 22 State Seed Certification Agencies and 101 Seed Testing Laboratories are functioning in the country. About 1,12,00,000 quintals of seeds were certified during 2002-03 against 62,23,000 quintals during 2001-02.

11. Currently, Central Seed Testing Laboratory (CSTL) in the Indian Agriculture Research Institute (IARI), New Delhi is functioning as Central Seed Laboratory under the Seeds Act, 1966. Necessary financial assistance is provided to the Laboratory to undertake functions assigned to it by the Central Government. State Seeds Testing Laboratories and State Seeds Certification Agencies are provided financial assistance for purchasing essential equipments. These arrangements are intended to ensure supply of good quality seeds to the farmers throughout the country.

12. A financial assistance of Rs.149.00 lakh is proposed to be provided during 2003-04 to State Seeds Testing Laboratories and State Seeds Certification Agencies. A sum of Rs.10.00 lakh has been approved for conducting training and an amount of Rs.9.00 lakh would be spent on maintaining Central Seed Committee and Central Seed Certification Board.

13. The legislation on 'Plant Varieties & Farmers Rights Protection Act 2001' (PVFRP Act 2001) has been enacted to fulfill the obligation under the TRIPs agreement of WTO and with the objective to stimulate investment for research and development both in the public and private sectors for development of new plant varieties by ensuring appropriate returns on such investments. This is expected to facilitate growth of the seeds industry in the country through domestic and foreign investment which will ensure the availability of high quality seeds and planting material to farmers. The legislation contains provisions for compulsory licensing in the public interest.

14. The framework for seed sector reforms has been prepared by the Department of Agriculture and Cooperation (DAC). For efficient utilization of resources, restructuring of NSC and SFCI to operate as a single agency has been suggested by the Planning Commission. The existing Seeds Act, 1966 is proposed to be replaced by a suitable legislation and the draft Seeds Bill, 2002 in this regard is under consideration by the Ministry of Law. Measures to further strengthen and reform the seeds sector and increase the availability of certified / quality seeds of different crops so as to achieve higher SRR will be continued during 2003-04 / Tenth Plan. For 2003-04 an allocation of Rs.27.00 crore has been provided for the schemes in the seeds sector against the BE of Rs. 26.96 crore for 2002-03 and X Plan allocation of Rs.275.00 crore.

## **Fertilizers and Integrated Nutrient Management**

15. The fertilizer consumption in the country has increased substantially. During the Ninth Plan, total fertilizer consumption in terms of N,P&K nutrients varied between 16.2 to 17.4 million tonnes, except during 1999-2000 when it reached a level of 18.0 million tonnes. During 2002-03, the estimated fertilizer consumption of 16.64 million tonnes was less than consumption of 17.36 million tonnes during 2001-02 mainly on account of prevailing drought conditions in several States.

16. The imbalance in terms of N,P&K nutrients use has, however, continued which was observed to be 6.4 : 2.5 : 1.0 during 2002-03 as against the ideal ratio of 4:2:1. In spite of the fact that the fertilizer consumption during 2002-03 declined, the nutrient use ratio in terms of N,P&K remained similar as in 2001-02.

17. All the chemical fertilizers except urea continued to be de-controlled. The Government continued to provide subsidy to the manufacturers of urea to ensure its availability to the farmers at reasonable prices. Also, for enabling sale of de-controlled phosphatic (P) and potassic (K) fertilizers at reasonable prices, the Government has been implementing a scheme of concession on sale of P&K fertilizers.

18. Central Fertilizer Quality Control & Training Institute (CFQC&TI), Faridabad and the Regional Laboratories are the notified laboratories under Clause 29 of Fertilizer Control Order (FCO) 1985 for analysis of fertilizer samples from entire country. There are 66 fertilizer testing laboratories in the country with capacity of testing 1,20,115 samples per annum. However, the capacity utilization in these laboratories has been below 90%. The capacity utilization is poor (below 45%), especially in the State laboratories in Assam, Bihar, Jharkhand, West Bengal and Mizoram mainly due to non-availability of chemicals, glasswares, equipments and trained manpower which needs to be addressed by the concerned State Governments. Of the fertilizers samples tested during 1998-99 to 2001-02, 5.3% to 6.6% were found to be of non-standards. In the case of micro nutrients, however, the proportion of sub-standard samples was found to be higher (23%). The quality concern is also important in case of mixtures of NP&K fertilizers and also single super phosphate (SSP) where the proportion of non-standard samples have been found to be higher (7.35%). Central and Regional Fertilizer Testing Laboratories under the DAC tested 9103 fertilizer samples during 2001-02 for quality check / control. During 2002-03, a total of 7,228 fertilizer samples were tested by these laboratories against the target of 8,500 samples. Though every year about 6000 samples are found non-standard, the prosecution launched are very few and that too in few States like Rajasthan, Uttar Pradesh, Tamil Nadu and Madhya Pradesh and the successful convictions are very few. The Fertilizer Control Order (FCO) 1985 has, therefore, been recently amended to make it more user friendly and more effectively enforceable. For 2003-04, a target of testing of 8500 fertilizer samples has been kept by the Central Fertilizer Testing Laboratories. Besides, a number of training programmes in fertilizer quality control are also proposed to be organized.

19. The policy being adopted by the Government is to propagate the balanced use of fertilizers, besides the increased use of organics with adoption of Integrated Nutrient Management (INM) concept. There are a total of 125 Bio Fertilizer Production Units in the country with an

installed capacity of 18,000 tonnes per annum. These include 77 Government of India supported units with annual production capacity of 8,775 tonnes. During Ninth Plan, 37 Bio Fertilizer Production Units were established in States with the support from the Government of India. The bio fertilizer samples are tested to maintain a check on quality of bio fertilizers sold in the country. Support to establishment of Bio Fertilizers Production Units and check on the quality control is to be continued during 2003-04 / Tenth Five Year Plan.

20. Besides the increased use of organics, propagation of adoption of INM and adoption of organic farming is also being encouraged. A scheme on organic farming, namely, 'National Project on Organic Farming', has been formulated by restructuring the on-going scheme of 'National Project on Development & Use of Biofertilizers'. This is likely to become operational during 2003-04. The focus of this scheme will be mainly on creating awareness and making available the technology of organic farming to the farmers; strengthening / creating infrastructure for testing; and putting in place the certification infrastructure so as to enable the certification of organic production of agricultural commodities for export promotion and also for domestic market. For implementation of the scheme and coordinating different activities, a National Institute of Organic Farming (NIOF) is proposed to be set up under the Department of Agriculture & Cooperation. Provision for an allocation of Rs. 92.50 crore has been made for implementation of 'National Project on Organic Farming' by the DAC in their X Plan allocation.

21. For 2003-04 an allocation of Rs.9.00 crore has been provided for the schemes relating to fertilizers and Integrated Nutrient Management against the BE of Rs.6.05 crore for 2002-03 and X Plan allocation of Rs.110.00 crore.

### **Plant Protection / Integrated Pest Management**

22. For the control of insects, pests and diseases in crops, the Integrated Pest Management (IPM) approach is being advocated. The promotion of IPM approach has helped in reducing the use of pesticides in agriculture from 61,357 tonnes in 1994-95 to 43,584 tonnes in 2000-01. Twenty six Central Integrated Pest Management Centers (CIPMCs) are operating in 23 States / UTs, in addition to State's own Plant Protection set up, to monitor the incidence of insects and diseases and to advocate the concept of IPM. During 2002-03, these centers have monitored 8.72 lakh ha of area for pests / diseases situation against the target of 8.00 lakh ha. Besides, 2238 million bio control agents were also mass-produced and released by these CIPMCs against the target of 2000 million numbers. With the support from Government of India 29 State Bio Control Laboratories in States and UTs have been established.

23. The contamination of agricultural produce with pesticides residues is a major concern which is affecting human health, besides affecting export performance of agricultural commodities. Through IPM approach, the need based / minimal use and the safe application of pesticides is being promoted. IPM package of practices have been evolved for 77 crops for implementation in States / UTs by the extension agencies.

24. To facilitate adoption of IPM approach and safer application of pesticides, training programmes are being organized by the Directorate of Plant Protection, Quarantine & Storage (DPPQ&S) through its CIPMCs and the National Plant Protection Training Institute (NPPTI),

Hyderabad. During 2002-03, the NPPTI conducted 28 regular courses against the target of 27 courses wherein 466 officers from various States and Central organizations were trained in different aspects of plant protection. During 2003-04, it is targeted to organize 27 training courses. The CIPMCs organized 504 Farmers Field Schools (FFSs) / demonstrations in rice, cotton, vegetables, pulses, groundnut, etc., against the target of 520 FFSs, in which 1,807 Agriculture Extension Officers (AEOs) and 15,123 farmers were trained. For 2003-04, a target of organization of 532 FFSs to train about 2,660 AEOs and 15,960 farmers has been fixed. Training infrastructure for IPM and pesticides quality control will further be strengthened during 2003-04 / Tenth Plan.

25. Import, manufacture, sale and use of pesticides are being regulated under the Insecticides Act, 1968 and the Rules framed thereunder. Enforcement of various provisions of the Insecticides Act, 1968 mainly rests with the State Governments. Eighteen States and one UT have set up 46 Pesticides Testing Laboratories (PTILs) with an annual capacity of analyzing over 56,116 samples for monitoring the quality status of pesticides. The Central Government has also set up a Central Insecticides Laboratory (CIL) at Faridabad, under section 16 of the Act to perform the statutory role of referral analysis. Besides, two Regional Pesticides Testing Laboratories (RPTLs) at Chandigarh and Kanpur have also been set up to supplement the resources of the States/ UTs in the analysis of pesticides. The CIL analyzed 3,063 pesticides samples, including 870 samples referred by various courts and States/ UTs during 2002-03 against the target of 1200 samples. Besides, 86 pesticides/ bio-pesticides were tested for bio-efficacy, phytotoxicity, compatibility, etc.; 20 pesticides for LD50 toxicity to assess the safety of pesticides; and 161 samples for packaging, labeling and leaflet requirements. The two Regional Pesticides Laboratories (RPTLs) analyzed 1783 samples for quality parameters during 2002-03. A Central Task Force has also been constituted in the DAC to organize and coordinate raids across the country to ensure the supply of quality pesticides to the farmers.

26. To ensure ecologically safer food products, the stress is on control of pesticide residues by fixing maximum residue limits (MRLs) to internationally accepted minimum tolerance level besides promoting safer use of Pesticides. In this connection, the Central Insecticides Board's Registration Committee (CIBRC) has finalized the format for submission of requisite data / information to be provided by applicants for registration of pesticides for fixation of maximum residues limits under PFA Act, 1954. Further, MRLs in respect of 5 pesticides have been fixed, out of 51 pesticides to be notified under the PFA Act, 1954 in addition to 71 pesticides for which MRLs had already been fixed prior to 2002-03. Another 21 pesticides have been banned for use in Indian agriculture. An expert group has also been constituted by CIBRC to examine the data available with reference to toxicity / bio efficacy, etc. with its Secretariat so as to enable fixing of MRLs for a number of pesticides registered prior to 1972. The matter will further be pursued during 2003-04 / Tenth Plan period. During 2002-03, a total of 4,056 applications were received for registration under Section 9 of the Insecticides Act, 1968, out of which 3,548 registration certificates were issued.

27. Plant Quarantine Regulatory measures are operative through [‘Destructive Insects & Pests Act 1914 (Act 2 of 1914)] to prevent the introduction into India and transport from one State to another of any insect, fungus or other pest, which is or may be destructive to crops. The Plants, Fruits & Seeds (Regulation of Imports into India) Order, 1989 has replaced an earlier notification

under the above act to regulate the import of plants, fruits and seeds through notified entry points so as to prevent the entry of destructive pests of crops. For the purpose 32 Plant Quarantine Stations are operating at international airports, seaports and border entry points. Two new Plant Quarantine Stations at Raxaul and Rupadiha were set up during 2002-03. During 2002-03, 1078.06 tonnes of imported seed propagation material and 74.39 lakh plants / plant materials were screened for contamination of pests and diseases. This quantity of seeds / propagation material was in addition to 67.45 lakh tonnes and 4.62 lakh tonnes of imported material screened for consumption purposes. A total of 55,476 import permits for seeds and plant materials were issued. For export, 161.96 lakh tonnes of agri produce and 133.49 lakh numbers of plants / plant materials was attended to by the PQ stations and 53,886 phyto sanitary certificates issued. Plant Quarantine facilities are to be further strengthened in the coming years.

28. During 2003-04 / Tenth Plan, the approach of IPM is to continue besides the measures for checking quality control of pesticides and checking the entry of alien insects, pests and pathogens into the country. For 2003-04, an allocation of Rs.25.00 crore has been provided for the schemes/ programmes relating to plan protection as compared to BE of Rs.19.78 crore for 2002-03 and X Plan allocation of Rs.220.00 crore.

### **Agricultural Implements & Machinery**

29. The efforts to make available energy efficient and time saving farm machines, implements and tools to the farmers by encouraging their mass production were continued during 2002-03 as envisaged for the Tenth Plan. The on-going central sector schemes in the machinery sector have been modified / restructured.

30. The existing 4 Farm Machinery Testing & Training Centres (FMTTIs) – Budni, Hissar, Garladinne, Biswanath Chariali, under the Department of Agriculture & Cooperation trained 4545 persons in use and maintenance of farm machinery during 2002-03, against the target of training 3500 persons. Besides, 140 machines comprising tractors, power tillers, combine harvesters, rice transplanters, reapers were field tested for their utility and performance against the annual target of 70 machines. To demonstrate the newly developed machines and implements, Rs.0.5 crore were provided to the ICAR during 2001-02. During 2002-03, Rs.0.75 crore were provided to States and ICAR for conducting such demonstrations. A total of 6421 field demonstrations were conducted on zero till seed drill, strip till drill, self propelled vertical conveyor reaper, manual / self propelled paddy transplanter, raised bed planter, sugarcane cutter planter, tractor / power tiller operated rotavator, thresher, power weeder, cono weeder, etc. for adoption by the farmers against the target of 500 demonstrations. These FMTTIs will continue to propagate the use of improved farm machines / implements and the newly developed ones for commercialization, besides trainings of trainers in maintenance and on use of farm machines & implements and field testing of newly developed machines & implements. A budget (B.E.) provision of Rs.3.90 crore for 2003-04 has been made for the schemes in the Machinery sector as was the case for 2002-03. The Tenth Plan allocation for the sector is Rs. 75.00 crore.

## **Agricultural Extension**

31. Department of Agriculture & Cooperation has continued its efforts to strengthen the infrastructure for agricultural extension and to develop human resource for extension activities in the States. The programmes taken up are: agricultural extension through voluntary organizations; strengthening of research extension; farmers linkages, strengthening of monitoring and evaluation of agricultural extension, agricultural extension through farmers organizations, human resource development in extension; and training of women in agriculture.

32. The training infrastructure created at the National, State and district levels is catering to the training needs of senior, middle and grass-root level extension functionaries. Optimization on use of infrastructure available for improving skills and existing knowledge of extension functionaries are being emphasized upon. During the year 2002-03 a total of 125 courses were planned which included 63 National Training Courses (NTCs); 50 State level Collaborative Training Courses (SLCTCs); and 12 Skill Upgradation Workshops (SUWs) on Human Resource Development in Agriculture with a total of 2620 participants. Against the 125 planned courses, 54 NTCs with 972 participants, 26 SLCTCs with 442 participants and 2 Skill Upgradation Workshops with 37 participants were organized during the year. For 2003-04 a target of 63 NTCs with 1260 participants; 56 SLCTCs with 1120 participants; and 12 Skill Upgradation Workshops with 240 participants has been fixed.

33. A total of 450 farm women's Self Help Groups were mobilized during 2002-03 and all the agricultural support services were provided to farm women through these Groups. Training and extension services were provided to 9000 farm women mobilised through 720 different training programmes; 15 Mahila Goshtis and 30 study tours were organized; and 1800 Result Demonstrations conducted. During 2003-04 all these activities would be continued.

34. Transfer of technology through 50 Non-Government Organizations (NGOs) was continued in 50 districts spread over 21 States. NGOs have made a positive impact in implementing identified activities through close collaboration with State Department of Agriculture and State Agricultural Universities (SAUs). A grant of Rs.5.0 lakh is provided to each NGO annually for implementing transfer of technology programmes.

35. The Scheme of Agricultural extension through 18 Farmer Organizations (FOs) in 9 States for undertaking activities like organization of commodity based workshops, farmers training, study tours, preparation and procurement of training material for farmer members, production and procurement of farm information material/audio-visual aids and organizing field-days and Kisan Goshties was continued during the year. A grant of Rs. 4.0 lakh is provided to each FO annually for carrying out aforesaid activities.

36. The on-going schemes on agricultural extension have been integrated and restructured to bring in reforms in agricultural extension at State level. The major thrust areas for reforms in policy framework of agricultural extension were; (i) reforming public sector extension to make it professionally competent, leaner and cost effective; (ii) encouraging private sector partnership in agricultural extension; (iii) augmenting media support to extension for capacity building and skill upgradation of farmers / farm women and extension functionaries; and (iv)



addressing gender concerns. The restructured schemes are likely to become operational during 2003-04.

37. For 2003-04 an allocation of Rs.78.55 crore has been provided for implementation of the schemes for agricultural extension against the B.E. of Rs.86.27 crore for 2002-03. The Tenth Plan allocation for the schemes in agricultural extension is Rs.550.00 crore.

### **Agri-Clinics and Agri-business Centres**

38. Besides the schemes for the development of human resource and infrastructure in extension a new scheme "Establishment of Agri Clinics and Agri-business Centres" was launched during 2001-02 with the objective to involve private sector in agricultural extension-information & support services, for supplementing efforts of Govt./Public sector agencies. The scheme aims at utilizing unemployed agriculture graduates or those willing to establish their own service/business centers to provide extension services to farmers on payment basis.

39. During 2002-03, a number of training programmes for the identified graduates were organized through 61 institutions, including 11 Non-Government Organizations (NGOs). Upto middle of June, 2003, out of 18,670 graduates who applied for such trainings, 3,245 were trained in 114 trainings organized at different institutions. Of the trained graduates, 543 are reported to have already set up their Agri-clinics/Agri-business centers in different areas of activities. The maximum number of 129 Agri-clinics /Agri-business centers were set up in Karnataka followed by 104 in Rajasthan, 72 in Maharashtra and 60 in Andhra Pradesh. The Agri clinics/ Agri business centers have been setup by the trained graduates in 16 states, including the UT, Pondicherry. The scheme is to be continued during 2003-04 with greater efforts to involve the private sector in a bigger way in agricultural extension.

40. During 2002-03, out of an allocation of Rs.5.00 crore under the scheme, Rs.5.985 crore was released to the Small Farmers Agri Business Consortium (SFAC), which was the nodal agency for implementing the scheme. For 2003-04, an allocation of Rs.40.00 crore has been made for implementation of the scheme. The Tenth Plan allocation for the scheme is Rs.175.00 crore.

### **Macro Management of Agriculture**

41. For better utilization of Central Assistance under the erstwhile Centrally Sponsored Schemes, a new approach 'Macro Management' has been adopted instead of the crop/activity specific individual schemes. Under this approach, States have been given flexibility to develop and pursue activities on the basis of their regional priorities. It is thus a major step towards achieving decentralization in pursuance of restoring primacy of States in agriculture development planning. In this process 27 schemes have been integrated and a Centrally Sponsored Scheme 'Macro Management – supplementation/complementation of State's effort through Work Plans' has been evolved. The Scheme aims at all round development of agriculture through Work Plans prepared by the States themselves. During 2002-03, an amount of Rs.581.20 crore was released to States against an allocation of Rs.736.86 crore under the Macro Management Scheme. For 2003-04, an allocation of Rs.700.00 crore has been provided under the scheme. The allocation for the Tenth Five Year Plan is Rs.4053.00 crore.

## **Cooperation**

42. The cooperative sector has been playing a significant role in the area of disbursing agriculture credit, providing market support to farmers, distribution of agricultural inputs and imparting cooperative education/ training etc. In order to provide greater functional autonomy to cooperatives and to professionalize their management, the Multi-State Cooperative Societies Act was enacted in August, 2002. Rules under the Act have already been framed. The Scheme of National Cooperative Training and Education has been restructured. An amount of Rs. 231 crore has been proposed for the scheme during the Tenth Plan. The scheme is providing education and training to the cooperative personnel for enhancing their efficiency in the management of cooperative societies. About 1.32 lakh persons have been trained during the Ninth Plan period. National Cooperative Union of India (NCUI) will continue to manage the cooperative training structure. The National Cooperative Development Corporation (NCDC) has been restructured during the Tenth Plan covering various schemes, namely, Assistance for Cooperative Marketing, Processing, Storage in underdeveloped States/ UTs, Assistance to National Cooperative Federations, Integrated Cooperative Development Projects in selected districts, Share Capital participation in Cooperative Spinning Mills (Growers) and Rehabilitation of Cooperative Processing Units and Assistance for Development of Women Cooperatives (new scheme). The Cooperation Division of Department of Agriculture and Cooperation (DAC) is also implementing the Market Intervention Scheme (MIS) for procurement of horticultural commodities on the request of the States/ UT governments. The MIS is implemented in order to protect the growers of horticultural commodities from making distress sale in the event of bumper crops, particularly during the peak arrival period.

## **Credit**

43. The total quantum of ground level credit flow for agriculture and allied activities provided by cooperative banks, commercial banks, Regional Rural Banks (RRBs) and other agencies increased from Rs. 62045 crore during 2001-02 to an estimated level of Rs. 70810 crore in 2002-03. The Kisan Credit Card (KCC) scheme which aims at facilitating adequate and timely credit support from banking system to the farmers for cultivation needs including purchase of inputs in a flexible and cost-effective manner has been gaining popularity over the years since its inception in 1998-99. As on 31<sup>st</sup> March, 2003, 313.44 lakh KCCs involving sanctioned bank loan of Rs. 76498.80 crore were issued to the farmers by cooperative banks, RRBs and commercial banks. NABARD has created Cooperative Development Fund (CDF) for providing assistance to cooperative credit institutions for professionalisation, training and capacity building, improving their infrastructure facility, computerization, improving mobility of the field staff, etc. The assistance sanctioned to various cooperative institutions from CDF till 31<sup>st</sup> March, 2003 aggregated to Rs. 57.31 crore. Recently, Government has announced an interest rate not exceeding 9 per cent up to a loan amount of Rs. 50,000 to the farmers. This will be done by bypassing the State Cooperative Banks and lending directly to District Cooperative Banks by the NABARD. In order to accelerate the pace of credit flow to the North Eastern (NE) region, NABARD has taken various initiatives which include the following:

- As the cooperatives and RRBs in NE Region are weak, NABARD has, as a special case, extended all refinance facilities to the commercial banks in this region. These facilities are available only to cooperatives and RRBs in other regions of the country.

- NABARD provides refinance to all financing agencies (including commercial banks) at 100 per cent of their ground level credit for non-farm sector as against 90 per cent applicable to the rest of the country.
- The eligibility norm relating to minimum recovery level for drawing unrestricted refinance from NABARD under schematic lending has been fixed low at 50 per cent for NE Region as against 70 per cent stipulated for other parts of the country.
- Short-Term (Seasonal Agricultural Operation) credit limits are sanctioned under relaxed criteria.
- NABARD charges lowest rate of interest on all ST (SAO) refinance.
- North-Eastern Development Finance Corporation Ltd. (NEDFI), Guwahati has been made an eligible institution for NABARD refinance.

### **Agricultural Insurance**

44. The National Agricultural Insurance Scheme (NAIS), introduced from Rabi 1999-2000 replacing the earlier Comprehensive Crop Insurance Scheme, provides greater coverage in terms of farmers (non-loanee farmers brought under coverage), crops (annual, commercial/ horticultural crops included) and risks (i.e. upto the value of threshold yield). The premia structure in the scheme has been rationalized to achieve greater financial viability. The implementing states now have equal share in the financial liabilities (i.e. Sharing of financial liabilities between the Central and State Government is 1:1). At present the scheme is being implemented in 21 States and 2 UTs. An amount of Rs. 1500 crore has been kept under Central Plan outlay for implementing the scheme in the Tenth Plan. A new company, named National Agriculture Insurance Company of India Ltd., has been set up with paid up capital of Rs. 200 crore consisting of 30 per cent contribution by NABARD and 70 per cent by General Insurance Company and its four subsidiaries.

### **National Agriculture Information System**

45. National Agriculture Information System has been introduced to cover all the States and UTs. It is expected that all information relating to agriculture would be available on web-sites in due course of time for the use of farmers, exporters, traders and research institutions, State agriculture departments and Central Government . The scheme is expected to harness the power of information in boosting agricultural growth and incomes of the farmers.

### **Agricultural Marketing**

46. A new Central Sector scheme for construction/ renovation/ expansion of rural godowns has been introduced to provide the facilities of storage, pledge financing and other marketing services to the farmers. The main aim of the scheme is to enable small farmers to enhance their holding capacity and thereby to avoid distress sale. The scheme provides them with the facilities of loan at a lower rate of interest. The scheme envisages provision of grading and standardization of agriculture produce at the time of storage. During the Tenth Plan, an additional storage capacity of 70 lakh MT in private and cooperative sector is envisaged. Under the scheme, subsidy of 25 per cent on the capital cost of construction of godowns would be provided after the completion of the project. Nearly 2373 number of godowns with a storage capacity of 36.62

lakh M. Tonnes have already been sanctioned. Another scheme, Development of Market Infrastructure, Grading and Standardization, has also been formulated at an estimated cost of Rs. 1103.60 crore with a Central subsidy of Rs. 305 crore. Under the scheme, central assistance to State Government owned markets has been proposed. The State Governments undertaking the envisaged reforms in the agricultural marketing sector will be eligible for central assistance. Yet another scheme, Agriculture Marketing Information Network (AGMARKNET), is under implementation. A total number of 810 nodes have been covered under this scheme comprising of 735 agriculture produce markets and State Agriculture Marketing Boards/ Directorates, etc.

## **Horticulture and Plantation Crops**

### **Horticulture**

47. Horticulture sector has a prominent place in Indian agriculture. Despite favourable agro-climatic conditions, vast resources of manpower and infrastructure for R&D, the existing potential for horticulture has not been fully harnessed. Role of horticulture in improving productivity of land, generating employment, improving economic conditions of the farmers and enhancing exports has been well established. This sector has emerged as a promising area for diversification of Indian agriculture on account of high income and employment generation per unit area and environment friendly production systems. This sector also ensures enhanced food and nutritional security. The estimated production of horticulture consisting of fruits, vegetables, flowers, nuts, spices and others was 149.2 million tonnes during 1999-2000. It rose to 152.5 million tonnes in 2000-2001 resulting in 2.2 percent growth. The area under this group of crops increased only marginally from 15.3 million ha. to 15.7 million ha during this period. National Horticulture Board and Coconut Development Board are implementing major developmental programmes. In addition to these, schemes are approved and financial support given annually to the State Governments under Macro-Management to provide boost to horticulture sector.

### **National Horticulture Board (NHB)**

48. NHB's Back ended Credit Linked Capital Investment Subsidy Scheme for construction/expansion/modernization of cold storages and storages for horticulture produce has become highly attractive. Under the Scheme, 681 projects have been sanctioned for creation of 30.53 lakh tonnes capacity of cold storages and other storages for horticulture products. The sanctioned subsidy amount comes to Rs.200.41 crore. Besides, NHB had also sanctioned 744 projects, with release of Subsidy amount of Rs.30.71 crore, under Development of Commercial Horticulture through production and Post-Harvest Management.

### **Coconut Development Board**

49. India being a major coconut producing country in the world, emphasis is given on production and distribution of quality planting material, establishment and maintenance of Demonstrator-cum-Seed Production (DSP) farms, nurseries and distribution of hybrids. Besides, thrust is given on area expansion, pest management, organic manure, market promotion etc. A sum of Rs.27.27 crore was released during 2001-02. The 300 DSP farms were maintained and an area of 34181 ha. was brought under cultivation till 2001-02. A number of demonstrations were also sponsored and carried out for transfer of technology.

## **Technology Mission for Integrated Development of Horticulture in North East States and Sikkim**

50. Under the Centrally Sponsored Scheme of Technology Mission for Integrated Development of Horticulture in North Eastern States including Sikkim, a sum of Rs.67.25 crore was released during 2000-01 under all the 4 Mini Missions. During 2002-03 funds released were Rs.91.07 crore. Activities such as area expansion, community tanks, tubewells, nurseries, training, organic farming, bio-fertilizers, IPM activities, promotion of rural and wholesale markets, building labs and processing units were taken-up under this scheme. The area expansion under horticulture was of the order of 24074 ha. in 2001-02. All these schemes are to be continued in 2003-04.

51. Although technological infusion under ongoing programmes and some infrastructural support have created good impact, there are several constraints in the form of inadequacy of technologies and infrastructure, small size of land holdings, preponderance of old and senile orchards, shortage of good quality, disease free seeds and elite planting materials, prevalence of diseases and pests and poor post-harvest management practices such as handling, sorting, grading, packaging, transportation and storage facilities. Marketing and processing network is also unsatisfactory. Removal of these constraints would enable realization of full potential of the horticulture sector.

52. The thrust areas identified in Tenth plan include improving production and productivity, area expansion with improved cultivars and varieties, reducing cost of production by supplying good quality, disease free, high yielding seed and planting materials, value addition at farmers' level and removal of restrictions on processing industry including alcohol based on grain, fruits, vegetables and sugarcane, quality improvement by application of latest technologies and improved farm practices, promoting domestic marketing and exports, strengthening organizational support, human resource development, mission mode approach in the region of high potential such as North-East states including Sikkim. The emerging areas in the horticulture are medicinal and aromatic plants, floriculture, mushrooms etc. and beekeeping which enhances crop productivity. Therefore, it is proposed to provide added thrust to all these sub-sectors in horticulture by continuing various plan developmental programmes. Infrastructure for post-harvest management and cold storage system are proposed to be given boost with back ended credit linked subsidy mode of investment with involvement of NABARD and banking sector. Technology Mission for Integrated Development of Horticulture is proposed to be extended to Himachal Pradesh, Uttaranchal and Jammu & Kashmir to realize the vast potential of horticulture in the region.

53. As a part of new initiative two Central sector schemes, namely i) High Tech Horticulture and Precision Farming and ii) Sustainable Development of Horticulture towards Technological Interventions are being launched.

### **Plantation Crops**

54. Tea, Coffee and Rubber are traditional plantation crops in the country. These are mostly grown in southern and northeastern states. Apart from meeting the domestic consumption demand, this group of commodities also makes significant contribution to the country's export

basket. These crops are labour intensive and a good source of direct and indirect employment opportunities to masses. Preservation of biosphere and ecology of the respective regions is an added advantage of these groups of plantation crops.

### **Tea**

55. Tea Board is implementing five schemes, namely, Tea Plantation Development, Market Promotion, Quality Upgradation and Product Diversification, Research & Development and Human resource Development. Estimated Tea production declined from 853.71 million Kg. in 2001-02 to 826.16 million Kg. in 2002-03. Export of tea was valued at Rs. 1719 crore in 2001-02. There was decline in 2002-03 to a level of Rs. 1622 crore in 2002-03, resulting fall by 5.64 per cent.

56. A separate Tea Plantation Fund has been created for Development, Modernization and Rehabilitation of the Tea Plantation Sector by way of abolishing the excise duty of Rs.1 per kg. on tea and replacing it by a Cess of equal amount.

### **Coffee**

57. Coffee Board is implementing a large number of small size schemes such as Crop Protection and Management, Post-Harvest Technologies, Special Area Programmes for North East region and Other Tribal Areas, Market Development and Promotion, Support for Small Grower Sector and Human resource Development etc. aimed at Plantation Improvement. Besides, a new scheme of Interest Subsidy to the Small Grower is also introduced for two years of 2002-03 and 2003-04. This Scheme was also extended to large coffee growers during 2002-03. Although area under coffee cultivation increased marginally from 3.47 lakh ha to 3.49 lakh ha in 2002-03, production decreased from 3.01 lakh tonnes to 2.75 lakh tonnes during this period. Productivity also suffered a set back from 937 kg per ha to 900 kg per ha in these two years. Coffee planters were reluctant to use farm input on account of sluggish international demand and depressed prices. About 80 per cent of the coffee produced in the country is exported. The coffee export was worth Rs.1095 crore in 2001-02, whereas it stood at Rs. 974 crore in 2002-03, resulting 11.1 percent decline during this period.

### **Rubber**

58. Rubber Board is implementing five schemes on Research, Plantation Development, Development in North East Region Scheme, Processing Quality Upgradation & Product Diversification of Natural Rubber and Market Development. Although area under Rubber remained constant at 5.67 lakh ha, production estimate of natural rubber has shown a buoyancy during last year. The production of natural rubber increased from 6.31 lakh tonnes in 2001-02 to 6.38 lakh tonnes in 2002-03. There was marginal increase in productivity from 1576 kg per ha to 1580 kg per ha during these two years.

### **Spices**

59. Spices Board is implementing five Schemes for Export Oriented Production mainly of small and large Cardamom, Export Development, Export Oriented Research, Quality Improvement

and Human resource Development. Besides, a new scheme for Export Promotion of spices is planned for Tenth Plan. The value of export of spices was Rs. 1497 crore in 2001-02. This was increased to Rs. 1615 crore in 2002-03, resulting in 7.88 per cent growth during these two years. There are other minor schemes for Quality Improvement of Cashew implemented by Cashew Export Promotion Council (CEPC), financial support to Indian Institute of Plantation Management (IIPM) etc.

60. Broadly the major constraints in all round development of plantation crops include old age of plantations, slower pace of re-plantation, inadequate irrigation facilities, predominance of small land holding size of the plantation, inadequate availability of good quality, disease free planting material and lack of scientific plantation development.

61. It is proposed to address these constraints during the Tenth Plan. Since plantation crops also suffered severely in the past few years on account of sluggish demand and the consequent depressed prices in the international market, it is proposed to encourage productivity enhancement and quality improvement through various measures. Measures are also proposed for supplementing the sources of income of the planters by inter-cropping practices and diversification of end use of products like rubber, rubber-wood etc. Tenth Plan Outlay for plantation crops including that of Spices Board, Cashew Export Promotion Council (CEPC) etc. has been fixed at Rs.1212.00 crore.

### **Agricultural Research & Education**

62. Indian Council of Agricultural Research (ICAR) is the nodal agency at the national level for promotion of science and technology in the areas of agricultural research and education and demonstration of new technologies as frontline extension activities. The ICAR carries out research through a chain of 47 Institutes including 4 with 'deemed university' status, 5 National Bureaus, 12 Project Directorates, 32 National Research Centres, 158 Regional Stations and 77 All India Coordinated Research Projects (AICRPs). Establishment of the National Bureau of Agriculturally Important Microbes was taken up during the IX Plan with the objective to pool all the available resources and upgrade the facilities to meet the current and future requirement for the conservation and characterization of micro organisms of veterinary importance. The educational programmes are carried out by 34 State Agricultural Universities (SAUs), and a Central Agricultural University (CAU). The educational institutions together have an intake capacity of about 11000 students for graduate and 5000 students for post graduate courses.

63. As a result of Zero Based Budgeting (ZBB) exercise taken up in consultation with Department of Agricultural Research & Education (DARE) / Indian Council of Agricultural Research (ICAR). 9 schemes out of 235 on-going projects/ schemes weeded out and remaining 226 schemes have been restructured into 72 schemes through merger/ convergence. This has been done for efficient utilization of resources including the scientific manpower and also for better monitoring and implementation of schemes/ projects.

64. Under the scheme for Conservation of plant genetic resources, during 2002-03, 15,243 accessions of crops and their wild relatives were collected; 27,847 crop samples from 39 countries (including 79 of transgenic crops) were introduced and 27,245 accessions were added to the National Gene Bank. During 2003-04, more explorations are planned to be conducted for

collection of wild and weed relatives of crop species representing cultivated types of various crops to be raised for regeneration.

65. Research works in various areas in agriculture such as crop improvement, horticulture, natural resources management, livestock improvement, fisheries development, etc. are being implemented. More than 85 varieties/ hybrids of various crops were evolved / developed during 2002-03. Twenty one varieties of rice and 2 varieties of maize developed by ICAR were released by the Central and State Variety Release Committees. Eight new varieties of pulses and 16 varieties of oilseeds were identified for release. A number of varieties of different fruits and vegetables were also identified for release during 2002-03. Besides, 6 new improved varieties of medicinal and aromatic plants – two of opium poppy, one each of *Isabgol*, *Aswagandha*, *Asilio* and long pepper were developed. Research work on development of transgenics was also continued during 2002-03.

66. The first phase of International Rice Genome Sequencing was completed. A cytoplasmic-genic male sterility system along with restorer perfected for hybrid seed production in Indian mustard; 1400 varieties of different crops DNA finger printed; and a simple ready to use kit developed to differentiate transgenic Bt cotton from non-transgenic on the spot.

67. In the livestock and fisheries sectors, survey and characterization of genetic resources; identification of insulin-like growth factor binding protein-3 in cattle; development of Feedbase-2001 database; development of complete poultry feed formulation technology; in-vitro development of buffalo embryo; techniques for cheese, fruit, dahi, dehydrated chicken soup mix preparation; development of shrimp disease management techniques, and CIFELOSTRESS formulation for reducing fish mortality were some of several significant achievements during 2002-03

68. Under Technology Assessment, Refinement and Transfer, 344 Krishi Vigyan Kendras (KVKs) organized 18,461 training courses benefiting 0.43 million farmers and farm women; 3,237 vocational and skill-oriented training courses benefiting 66,000 rural youths; and 1,643 training programs benefiting 41,000 in-service personnel in various aspects of agriculture. The eight Trainers' Training Centres (ITCs) organized 188 training courses benefiting 2,893 participants. During 2003-04/X Plan more KVKs will be set up so as to ultimately have one KVK in each district and existing KVKs will be strengthened to meet the emerging needs of farmers through transfer of technology and to provide input support services. Considering the objectives of the Tenth Plan, during 2003-04 the thrust areas for research would include:

- development of modern technologies like molecular breeding and DNA finger printing, genome sequencing, development of transgenics; and sustainable development of natural resources together with preservation and exploitation of rich biodiversity;
- reorientation of research in the context of diversified agriculture, value addition and agri business;
- technologies for cost reduction & quality improvement;
- research on mechanization of small farms, hill agriculture, energy management and use of renewable sources of energy in agriculture;



- development of high yielding varieties / hybrids tolerant to a biotic and abiotic stresses, high productivity potential and quality grain / produce and also possessing grain quality suitable for export.

69. Besides, the research work on the development of technologies for organic farming (agricultural commodities as well as live stock produce) and for quantifying the vulnerability of Indian agriculture to increasing climatic variability and climate change so as to develop adaptation/ mitigation strategies for minimizing their negative impact will be intensified.

70. ICAR would also continue to take up the transfer of technology work through its Krishi Vigyan Kendras (KVKs) and Institutes to bridge the yield gap between the research yields and farmers yields. Development of infrastructure and upgradation of skills of staff working in KVKs will be taken up so that they can meet newly emerging challenges due to globalisation and commercialization of agriculture.

71. For 2003-04, an allocation of Rs.775.00 crore, at the BE level of 2002-03, has been provided to DARE/ ICAR. During 2002-03 an amount of Rs.637.90 crore was utilized against an allocation of Rs.775.00 (BE). Tenth Plan allocation for agricultural research has been stepped up to Rs.5368.00 crore as compared to Ninth Plan allocation of Rs.3376.95 crore.

## **Natural Resource Management**

### **National Watershed Development Project for Rainfed Areas (NWDPR)**

72. The programme is being implemented since the Eighth Plan with the twin objectives of improving production and productivity in the rainfed areas and restoring ecological balance. NWDPR has since been restructured and the Common Approach for Watershed Development and New Operational Guidelines for NWDPR have been put into operation from November 2000 onwards. The restructured NWDPR allows a greater degree of flexibility in choice of technology and decentralization of implementation. It is now mandatory for the projects to be planned, implemented, monitored and maintained by the watershed community.

### **Watershed Development Project in Shifting Cultivation areas**

73. The Watershed Development Project in Shifting cultivation Areas (WDPSCA) has been revived in 1994-95 and is in operation with 100% financial assistance from the Central Government covering the whole of the North Eastern Region along with Andhra Pradesh and Orissa. An area of 157366 ha. was treated with an investment of Rs.82.01 crore during Ninth Plan. Area treated and investment in 2002-03 was 19366 ha. and Rs.19.67 crore respectively.

### **Soil Conservation for Enhancing Productivity of Degraded Lands in the Catchments of River Valley Projects and Flood Prone Rivers (RVP & FPR)**

74. A scheme on “**Soil Conservation for Enhancing Productivity of Degraded Lands in the Catchments of River Valley Projects and Flood Prone Rivers (RVP & FPR)**” is being implemented to enhance the productivity of degraded lands, minimize siltation of reservoirs and moderation of the flood menace in flood prone rivers . This is a merged scheme of the Ninth

Plan schemes on Soil conservation in catchments of River Valley Projects and Integrated Watershed Management in the catchments of Flood Prone Rivers and is in operation in 52 catchments spread over 20 States, namely, Assam, Andhra Pradesh, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Mizoram, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal. The total catchment area of 52 catchments covered under RVP & FPR Scheme is 96.1 million ha. out of which 25.62 million ha. area falls under high and very high priority zone in the Third Plan for the purpose of treatment. Since inception of the programme till the Ninth Plan (2001-02), an area of 54.86 lakh ha. has been treated with an expenditure of Rs.1516.21 crore.

### **Reclamation of Alkali Soils**

75. The scheme is in operation since 1974-75 in all the States where soil alkalinity exists. The main objective of the scheme is to reclaim land affected by alkalinity and improve land and crop productivity including development of horticulture, fuelwood and fodder species. The scheme also endeavors to enhance the capacity of execution personnel and farmers in respect of alkali soil reclamation technology. Since inception upto Ninth Plan, 5.81 lakh ha. have been treated with an investment of Rs.76.38 crore.

### **Watershed Development Fund**

76. It was established in 1999-2000 at National Bank for Agriculture and Rural Development (NABARD) with the objective of integrated watershed development in 100 priority districts through participatory approach. The total corpus of the fund is Rs.200 crore which includes Rs.100 crore contribution by NABARD and a matching contribution of Rs.100 crore by the Deptt. of Agriculture & Cooperation. The fund is to be utilized to create framework conditions to replicate and consolidate the isolated successful initiatives under different watershed development programmes in the Government, semi-Government and NGO sectors. Under the scheme, 14 States are to be covered in two phases; 6 States viz. Andhra Pradesh, Maharashtra, Gujarat, Orissa and Uttar Pradesh in phase I and 8 States viz. Bihar, Karnataka, Rajasthan, Tamil Nadu, Jammu & Kashmir, West Bengal, Himachal Pradesh and Haryana are to be covered in phase II.

### **Eco Restoration of Degraded Catchments of Rivers in Jammu & Kashmir**

77. As per the announcement made by the Prime Minister in May 2002, Eco Restoration of Degraded Catchments of Jhelum, Chenab and Shivalik in J&K has been taken-up recently. A sum of Rs.100 crore is earmarked under Macro Management. The scheme is aimed at enhancement of productivity of degraded land. The scheme aims at:

- Enhancement of productivity of degraded land.
- Reduction of run-off from the catchments to reduce peak flow
- Prevention of soil loss from catchment areas
- Improvement of land capability and moisture regime
- Creation of awareness for catchment care
- Creation of new employment opportunities

## **8.2 ANIMAL HUSBANDRY AND DAIRYING**

### **Introduction**

78. India has a large livestock population, accounting for about 57 per cent of the world buffalo population and 16 per cent of the cattle population. Due to low economic status of livestock owners, much of the livestock is reared under sub optimal conditions. Despite this constraint, India has now become the largest producer of milk in the world. The contribution of animal husbandry & dairying to total GDP was 5.59 per cent in 2001-02 at current prices. The contribution of milk alone (Rs. 1,03,804 crore) in the value of output of agriculture and allied sectors was higher than paddy (Rs. 73,965 crore), wheat (Rs. 43,816 crore) and sugarcane (Rs. 28,592 crore). In 2001-02, besides 84.6 million tonnes of milk, the livestock sector contributed 34 billion eggs, 50.7 million kgs of wool, 4.92 million tonnes of meat and 5.8 million tonnes of fish. Livestock sector provides regular employment to about 11 million in principal status and 8 million in subsidiary status. Women constitute 69 per cent of the labour force in livestock sector as against 35 per cent in crop farming. Export earnings from livestock related products were Rs. 3841 crore in 2001-02.

79. The strategies to achieve growth are: rapid genetic upgradation of cattle and buffalo, provision of health coverage including creation of disease free zones, provision of nutritious feed and fodder and development of marketing infrastructure for dairying.

### **Review of Annual Plan 2002-03**

#### **CATTLE AND BUFFALO DEVELOPMENT**

80. A comprehensive National Project for Cattle and Buffalo Breeding as a Centrally Sponsored Scheme has been launched in the country with effect from October, 2000. This project envisages 100% grants-in-aid for various cattle and buffalo breeding activities and to ensure sustainability of operations as well as quality in breeding inputs and services. However the implementation of the scheme is not going as envisaged. There is a glaring difference between the target and achievement in major items (like acquisition of bulls for natural mating, mobile AI centers, strengthening semen stations and sperm bank) at the end of first 3 years of the five-year project (Phase I). For proper implementation of the project, the State level monitoring and Management Information System should become functional and effective. There is also need for uniform standards for evaluation of project implementation across the states. The Website of Department of Animal Husbandry and Dairying could be used for dissemination of information like availability of bulls along with their performance, production of semen, progress of the project.

81. The nation experienced sever drought during 2002-03 and the livestock population in the drought affected states suffered immensely particularly due to non-availability of fodder and water. Central assistance of Rs. 752 crore was released for cattle care in Rajasthan ( Rs. 483.5 crore), Andhra Pradesh (Rs. 55.3 crore), Gujrat (Rs. 39.8 crore), Punjab (Rs. 39.7 crore), Tamilnadu (Rs. 31.5 crore), Haryana (Rs. 31 crore), Karnataka (Rs. 17 crore), Orissa (Rs. 15 crore), Himachal Pradesh (Rs. 11.5 crore).

## **DAIRY DEVELOPMENT**

82. After the completion of Operation Flood Programme in April 1996, the two major programmes for dairy development are: I) Integrated Dairy Development Programme (IDDP) in Non-Operation Flood, Hilly and Backward areas and II) Assistance to Cooperatives. Under the IDDP scheme, 50 state project proposal had been sanctioned upto 2001-02 with total allocation of Rs. 260 crore. Maharashtra received maximum assistance (Rs. 39.27 crore) followed by Uttarpradesh (Rs. 32.32 crore), Orissa (Rs. 24.80 crore), Chattisgarh (Rs. 18.37 crore), Bihar (Rs. 13.84 crore), Andhra Pradesh (Rs. 13.81 crore), Assam (Rs. 12.61 crore). The performance of the project is not satisfactory. There is shortfall in the achievement of targets with respect of formation of Dairy Co-operative Societies (DCS) and milk procurement. Economic healths of many DCS are not good resulting in high mortality of DCS. There is need for mid-term correction in the approach and mode of implementation of the project. The scheme 'Assistance to Cooperatives' has been approved in January 2000 for providing assistance in the form of grants for rehabilitation of loss-making district milk co-operative unions. Out of 168 Milk Unions, 58 Milk Unions (34.5%) were running in loss as on March 2000. Many loss making cooperative milk unions are unable to avail the benefit of the scheme as the States are finding difficulty in contribution of matching grants (50%). The continuation of Delhi Milk Scheme (DMS) as a subordinate office of the Union Ministry of Agriculture has been considered from time to time. Although a decision to transfer DMS to the Govt. of NCT of Delhi was taken as early as June, 1997, but it has not yet been implemented. According to the ZBB decision the scheme has to be weeded out after 6 months of the current financial year.

83. A new scheme "Strengthening Infrastructure for Quality and Clean Milk Production" has been recommended for implementation in the Tenth Plan. In this scheme 100% grant will be provided for training for Clean Milk production, providing utensils and accessories for clean milk production, and strengthening existing Lab facilities. Financial assistance in the ratio of 75:25 will be provided for purchase of bulk coolers.

## **POULTRY DEVELOPMENT**

84. The Ninth Plan scheme 'Assistance to State Poultry/Duck Farms' had been restructured by Department of Animal Husbandry and Dairying in the year 2002-03. Under the scheme at least two poultry farms in each state will be strengthened with 100% central assistance for Northeastern states and 80% assistance for other states. The other promising birds like guinea fowl, turkey, quail etc would be taken as a new activity. The Department would also explore the possibility of concurrent evaluation of the implementation of the scheme during the Tenth Plan.

## **ANIMAL HEALTH**

85. A new scheme on "Livestock Health and Disease Control" with an allocation of Rs. 535 crore has been started from 2002-2003. The scheme has been formulated with merger of 3 existing schemes viz., (i) Assistance to States for Control of Animal Diseases, (75:25 sharing basis, Rs. 270 crore) (ii) Professional Efficiency Development (50:50, Rs.25 crore) (iii) National Project on Rinderpest Eradication (100% grant, Rs. 40 crore) and (iv) one new programme (Foot and Mouth Disease Control, 100% grant, Rs. 200 crore). In Assistance to State for Control of

Animal Diseases component, emphasis is on immunization of animals against economically important animal diseases (like Hemorrhagic septicemia, Anthrax, Black quarter). Endeavor has continued for attaining the final stage of freedom from Rinderpest infection. It is proposed that 20 crore Foot and Mouth Disease vaccinations will be carried out in 4 crore animals during the Tenth Plan. All components of the scheme are proposed to be implemented through out the country except the component Foot and Mouth Disease Control Programme, which would be taken up in 54 districts of 3 selected Zones of the country. The Project is being implemented by State/Union Territory Governments with cooperation from ICAR, Veterinary Universities/Colleges, involving Gram Panchayat and other social institutions. A mid term evaluation by an independent external agency would be necessary for FMD programme and restructuring, if any, would be done in consultation with the Planning Commission.

### **Annual Plan 2003-04**

86. The Department of Animal Husbandry and Dairying has proposed to implement 18 schemes, of which 5 are new schemes viz., Creation of Disease Free Zones, Poultry/Dairy Venture Capital Fund, Strengthening of infrastructure for quality and clean milk production, Conservation of small ruminants & pack animals and Strengthening of Database & Information Networking. Of these, one relates to Secretariat and Economic Services, 8 relate to animal husbandry, 4 to Dairy Development and 5 to Fisheries sector. Planning Commission has accorded 'In Principle' approval for the all the new schemes. The BE for the year 2003-04 is Rs. 202 crore (Animal Husbandry Rs. 172.10 crore and Dairying 29.90 crore). The maximum allocation is for the scheme 'Livestock Health and Disease Control' (35%) followed by National Project on Cattle and Buffalo Breeding Programme (23.8%) and Dairying (14.8%). The different Central Sector schemes like Central Cattle Development Organization, Central Sheep Breeding Farm, Central Fodder Development Organization, Central Poultry Development Organization and Directorate of Animal Health will receive about 16% of total allocation.

87. The Department of Animal Husbandry and Dairying formulated a 'macro management' scheme by amalgamating the four on-going schemes viz., Control of Animal Diseases, Professional Efficiency Development, National Project on Rinderpest Eradication and Foot & Mouth Disease Control Programme (New). The whole country is at present provisionally free from rinderpest with effect from 1<sup>st</sup> March, 1998. The present efforts are directed to achieve the second stage of "Substantive Freedom from Rinderpest Disease". Sero Surveillance work will be conducted in the randomly selected villages across the country to generate information for preparing dossier to be submitted to Office International des Epizooties (OIE) for attaining the final stage of Freedom from Rinderpest Infection. National Project on Cattle & Buffalo Breeding envisages to progressively bring all the breedable females among the cattle and buffalo under organized breeding through arranging delivery of vastly improved artificial insemination at the farmers' door.

### **88. Strategy and Policy Initiative**

- Genetic upgradation of indigenous/native cattle and buffaloes using proven semen and high quality pedigreed bulls and by expanding artificial insemination and natural service network to provide services at the farmer's level. Production of progeny

tested bulls in collaboration with military dairy farms, government/institution farms and gaushalas will be taken up.

- Conservation of livestock breeds showing decline in number or facing extinction.
- Adoption of national immunization programme to control prevalent animal diseases. Effort will be made for creation of disease free zones.
- Development of fodder through cultivation of fodder crops and fodder trees, regeneration of the grazing lands and proper management of common property resources are essential for sustainable animal production. Special emphasis is needed for propagation of indigenous grasses like Sawan grass of Rajasthan which contain relatively higher percentage of protein.
- Improvements of small ruminants (sheep and goat) and pack animals (equine and camel) should be taken up in the respective regions where such animals are predominant.
- Panchayats, Cooperatives and NGO'S should play a leading role in generating dedicated band of service providers at the farmers doorstep in their respective areas
- Strengthening infrastructure and programme for clean milk production as well as value addition would be the priority in dairy sector.
- Programme would be implemented to improve indigenous birds and promotion of backyard poultry in rural areas.

89. Information Network would be created based on animal production and health with active involvement of Institutions, Government Departments, Private industries, Cooperative, and NGO's.

## **8.3 PISCICULTURE & AQUACULTURE**

### **Introduction**

90 The Fisheries sector is one of the major sectors contributing to the socio-economic development of the country. As a source of cheap and nutritious food it plays an important role in terms of food security. It stimulates growth of a number of subsidiary industries in addition to contributing foreign exchange earnings through exports. It also contributes in supplementing the family income of households especially in the rural areas by providing scope for employment generation. India ranks 4<sup>th</sup> in fish production and 2<sup>nd</sup> in inland fish production in the world.

91. The main objectives of the fisheries development programmes during the 10<sup>th</sup> Five Year Plan are increasing production and productivity both from culture and capture fisheries especially from offshore and deep sea, rivers & reservoirs, besides management of coastal fisheries, vertical and horizontal development of aquaculture, infrastructure development, improved post-harvest management, habitat restoration and welfare of fishermen.

92. A sum of Rs.102 crore was allocated for implementation of Central / Centrally Sponsored Schemes in fishery sector during 2002-03, which was revised to Rs.82 crore under RE, 2002-03. A sum of Rs.95 crore has been allocated for implementation of central and centrally sponsored schemes in fisheries during 2003-04.

93. During the year 2001-02, the total fish production was 59.56 lakh tonnes as against 56.55 lakh tonnes during 2000-01. It is estimated that the fish production will be around 60.50 lakh tonnes during 2002-03. The export of marine products was 4.58 lakh tonnes valued at Rs.5815 crores during 2001-02. The fish seed production was 15758 million fry during 2001-02.

### **Review of Schemes/Programmes during 2002-03**

94. Since the major Centrally Sponsored Schemes of Development of Marine Fisheries was recommended to be weeded out beyond the Ninth Plan by the Core Committee on Zero Based Budgeting (ZBB) of Planning Commission, the programmes for development of traditional and small mechanized fishing sectors could not be implemented before the ZBB recommendation could be got reviewed by competent authority. However, for development of infrastructure facilities in Marine sector 13 fish landing centers were sanctioned including 11 in Andhra Pradesh, 1 in Orissa and 1 in Andaman and Nicobar Islands. In the inland sector vertical and horizontal development of aquaculture was one of the major production oriented programmes implemented through a network of 429 Fish Farmer Development Agencies (FFDAs), 39 Brackish Water Fish Farmer Development Agencies (BFDAs) functioning in the country. About 30000 ha. water area is anticipated to be brought under scientific fish farming and 25000 fish farmers are to be imparted training in improved aquaculture practices during 2002-03. The achievement made under water area coverage is expected to be near about the target fixed and the achievement made in training of fish farmers is higher than the target of 20000 during 2002-03. The programme of collection of inland fisheries statistics was continued on the existing pattern of assistance during 2002-03. Besides, the ongoing programmes for welfare of fishermen were also continued through the components of development of model fishermen

villages, Group Accident Insurance Scheme for active fishermen and saving cum relief during 2002-03. The Fisheries Institutes such as Fishery Survey of India, Mumbai, Central Institute of Fisheries Nautical and Engineering Training, Cochin, Integrated Fisheries Project, Cochin and Central Institute of Coastal Engineering for Fishery, Bangalore also continued their programmes of fishery survey, manpower training, post harvest development, and pre-investment survey etc. in fisheries as per their mandates during 2002-03.

#### **Schemes/Programmes proposed during 2003-04**

95. Some of the major programmes to be taken up in the marine sector would be development of marine fisheries through motorisation of traditional craft for technological upgradation of the traditional fishing sector, introduction of intermediate crafts for development of small mechanised fishing sector, introduction of resource specific deep sea fishing vessels, provision of subsidy for kerosene and diesel for traditional and small mechanized fishing sectors and a component for safety of fishermen. Setting up of additional fishing harbours and fish landing centres and development of post harvest operations are proposed to be taken under infrastructure development. Besides, welfare programmes for fishermen are also proposed to be continued with insurance coverage for active fishermen, housing and saving cum relief during 2003-04. The assistance to fisheries institutes will be continued by convergence of the activities under various institutes which are under Department of Animal Husbandry & Dairying at present. Besides a new scheme on Strengthening of data base and Information Networking on Fisheries is also proposed to be taken up during 2003-04.

96. In inland sector, development of fresh water aquaculture and brackish water aquaculture is proposed to be continued with the main objectives of popularizing fish farming, creating employment opportunities, diversifying aquaculture practices and providing assistance to fish farmers with a view to creation of a cadre of trained and well organized fish farmers fully engaged in aquaculture.

97. Thrust areas for development of fisheries during 2003-04 would be vertical and horizontal, expansion of aquaculture activities to increase production and productivity including development of cold-water fisheries, water logged areas into aquaculture states and utilization of inland saline/alkaline soils for aquaculture. In marine sector, development of fisheries from off shore and deep-sea areas would be given more emphasis for exploitation of un-exploited/under-exploited fishery resources from these areas. Welfare of fishermen would also be given due importance alongwith programmes for their safety while in fishing operation. Besides strengthening of database and information networking on fisheries is also to be taken up during 2003-04.



## **8.4 DEVELOPMENT OF WASTELANDS AND DEGRADED LANDS**

The Government attaches highest priority to development of degraded and wastelands in the country as the incidence of poverty correlates very strongly with drought prone, desert prone and areas dependent on rainfall for agricultural activities. The National Remote Sensing Agency (NRSA) in March, 2000 estimated 63.85 million hectare as wasteland while the Working Group on Watershed Development, Rainfed Farming and Natural Resource Management for the Tenth Five Year Plan estimated 88.5 million hectares as degraded land. For development of the degraded lands, programmes have been funded by the State to mitigate the harsh living conditions of people by adopting better land management, water harvesting and conservation practices on a watershed basis. Watershed Schemes implemented by Department of Land Resources, Department of Agriculture & Cooperation and Ministry of Environment & Forests have been discussed below:

### **Area Development Programmes of Department of Land Resources (DOLR)**

2. The C.H. Hanumantha Rao Committee recommended a common set of guidelines, operational objectives, strategies and expenditure norms for implementation of area development programmes viz; Drought Prone Area Programme (DPAP), Desert Development Programme (DDP) and Integrated Wastelands Development Project (IWDP) on watershed basis. Common guidelines have also been adopted for other watershed development programmes such as National Watershed Development Project for Rainfed Areas (NWDPRRA), development of catchment area of River Valley Projects and flood prone areas, being operated by the Ministry of Agriculture. Pursuant to the recommendations of the Hanumantha Rao Committee, Area Development Programmes are implemented on watershed basis with effect from 1.4.1995.

#### **(i) Drought Prone Area Programme (DPAP)**

3. DPAP was launched in 1973-74 with the objectives of (i) to minimize the adverse effects of drought on production of crops & livestock and productivity of land, water and human resources ultimately leading to the drought proofing of the affected areas, (ii) to promote overall economic development, and (iii) improve socio-economic conditions of the resource poor and disadvantaged sections in drought prone area.

4. Presently, 971 blocks of 183 districts in 16 States namely Andhra Pradesh, Bihar, Chattisgarh, Gujarat, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttranchal and West Bengal are covered by the programme. A total of 16,268 projects of each covering about 500 hectare area have been sanctioned under DPAP since 1995-96 upto 31.3.2003. Out of these, 3165 projects have already been completed and others are at various stages of implementation.

5. During 2003-04, an outlay of Rs.295.00 crore for 2400 projects has been provided to cover an area of 12 lakh hectares under DPAP, apart from meeting the requirement of funds for the ongoing project.

## **(ii) Desert Development Programme (DDP)**

6. The DDP was started in the year 1977-78 as a long-term measure for restoration of ecological balance by conserving, developing and harnessing land, water, livestock and human resources. The main objectives of the programme are: - (i) combating drought and desertification and encouraging restoration of ecological balance; (ii) mitigating the adverse effects of drought on crops and livestock and productivity of land, water and human resources; (iii) promoting economic development and improving socio economic conditions of the resource poor and disadvantaged sections of village community.

7. Presently, 235 blocks of 40 districts in seven States viz; Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka and Rajasthan are covered under the programme. A total of 8314 projects (including 1171 special projects for Rajasthan) have been sanctioned since 1995-96 to 2001-02. Out of these, 1209 projects have already been completed and others are at various stages of implementation.

8. During 2003-04, an outlay of Rs.265.00 crore has been provided to cover an area of 8 lakh hectares and for meeting the fund requirements of ongoing projects.

9. Under DPAP and DDP, funds are directly released to DRDAs/Zilla Parishads for implementation of the programme. From 1999-2000, the funding pattern under these programmes have been changed to 75:25 cost sharing basis between the Centre and the States for the projects sanctioned after 1.4.1999. The project cost is Rs. 30.00 lakh per project consisting of 500 hectares at the rate of Rs.6,000/- per hectare.

## **(iii) Integrated Wastelands Development Programme (IWDP)**

10. IWDP was started in 1988-89 by Ministry of Environment & Forests with an objective of development of wasteland based on village / micro watershed plans. However, the scheme was transferred to the Department of Wastelands Development (now called Department of Land Resources) during 1992-93.

11. IWDP is a Centrally Sponsored Scheme and the cost norm of Rs.4000 per hectare has been revised to Rs.6000 per hectare with effect from 1.4.2000. The increase of Rs.2000 is to be shared between the Centre and State Governments in the ratio of 75:25. Thus, the funding pattern of the scheme has been revised from 100% Central grant to sharing in the ratio of 11:1 between the Central Government and the State Governments. The projects under IWDP are generally sanctioned in areas not covered by DDP and DPAP. The programme is being implemented in 297 districts of the country.

12. A total of 472 projects covering 40.59 lakh hectares have been sanctioned since 1995-96 to 2002-03. Out of these, 16 projects have already been completed and others are at various stages of implementation.

13. In the Annual Plan 2003-04, an outlay of Rs 402.00 crore has been provided for IWDP, out of which Rs 60.00 crore has been earmarked for meeting the past liability on account of

watershed component under Employment Assurance Scheme and Rs 66.00 crore for Externally Aided Projects (DFID) and Rs. 1.00 crore is kept for new initiatives of Wasteland Development. Thus, the net amount of Rs 275.00 crore will be available to cover 14.5 lakh hectares under IWDP in 2003-04 and to meet the fund requirements of ongoing projects.

#### **(iv) Technology Development, Extension & Training (TDET)**

14. TDET scheme was launched during 1993-94 with a view to promoting the development and dissemination of suitable technologies for the reclamation of wastelands in order to secure sustained production of food, fuelwood, fodder etc. 100% Central grant is admissible to implement projects on wastelands owned by Government, Public Sector Undertakings, Universities, Panchayats, etc. In the case of projects included for the development of wastelands of private farmers / corporate bodies, the cost of the project is required to be shared on the basis of 60:40 between the Government and the beneficiaries. 137 projects covering an area of 55,450 hectares and cost of Rs. 116.26 lakh were sanctioned under the programme upto 31.3.2003.

#### **(v) Externally Aided Projects (EAPs)**

15. In addition to the above-mentioned programmes, presently five externally aided projects are under implementation with the assistance of different Foreign Donor Agencies. Two EAPs funded by DFID are being implemented in the States of Andhra Pradesh and Orissa for which funds are routed through DOLR and projects are implemented as per the common guidelines issued by the DOLR for watershed development programmes. In other three projects viz; Tree Growers Cooperative Projects, Attappady Wasteland Comprehensive Environmental Conservation Project and Haryana Community Forestry Project, funds are being provided to the Implementing Agencies by the Donor Agencies through the Department of Economic Affairs.

- (a) Andhra Pradesh Rural Livelihoods Project (APRLP) aims at implementation of pro poor watershed based sustainable rural livelihood approaches in five districts of Andhra Pradesh viz; Anantpur, Kurnool, Mehboobnagar, Nalgonda and Prakasam.
- (b) Western Orissa Rural Livelihoods Project (WORLP) is being implemented for development of watershed areas in four districts viz; Bolangir, Nuapada, Kalahandi and Bargarh of Orissa. The aim of the project is more effective approaches to Sustainable Rural Livelihoods adopted by Government agencies and other stakeholders in KBK districts and elsewhere in Orissa. These EAPs will, not only, deal with land improvement, but thrust would also be given on 'watershed plus' approach i.e. ensuring complete total livelihood support to the poor people on sustainable basis.

16. The Watershed programmes are evaluated to assess their impact. The recent studies sponsored by the Government have presented a mixed picture. Successful implementation of watershed projects under DPAP, DDP and IWDP have resulted an increase in the overall productivity of land and the water table. The studies also revealed that green vegetative cover has also improved in desert areas that would have a positive impact in checking soil erosion by water and wind. The programmes have also helped in overall economic development in the project areas. However, some major weaknesses like lack of people's participation, field staff

unfamiliar with participatory approaches, insecurity about fund availability at the grass root level, little emphasis on cohesive group formation, lack of transparent criteria for selecting areas and villages, lack of involvement of line agencies, weak horizontal linkages among various agencies at the district level, etc. have also been reported.

**(vi) HARIYALI – a new Initiative**

17. To address the issue of people's participation in development process, a new initiative 'HARIYALI' was launched on 27.1.2003. Under this initiative, new projects sanctioned after 1.4.2003 under IWDP, DPAP and DDP would be implemented through the PRIs.

**Department of Agriculture & Cooperation (DAC)**

18. Department of Agriculture (DAC) is implementing various programmes on the basis of common approach for watershed development with the basic thrust on enhancement of agricultural productivity in rainfed areas. These programmes are (i) National Watershed Development Project for Rainfed Areas (NWDPRRA), (ii) Shifting Cultivation: (iii) Soil Conservation for Enhancing Productivity of degraded lands in the catchments of River Valley Projects and Flood Prone Rivers (RVP & FPR) (iv) Reclamation of Alkali Soils.

19. Besides these programmes, DAC is also operating Watershed Development Fund (WDF) established in 1999-2000 at National Bank for Agriculture and Rural Development (NABARD) with the objective of implementing integrated watershed development in 100 priority districts through participatory approach. 14 States are to be covered by WDF in two phases.

20. In addition to above mentioned programmes, there are 17 Externally Aided Projects (EAPs) on Watershed and Land Reclamation & Development in operation in 15 major States covering about 1.50 million hectare with an estimated cost of Rs 2021.00 crore under the aegis of Ministry of Agriculture.

21. The Department of Agriculture and Cooperation (DAC) has devised a new scheme called 'Macro Management Approach' by integrating 27 identified Centrally Sponsored Schemes (CSSs) including the above mentioned watershed development schemes. Under Macro Management the fund provided under individual schemes are pooled together and the State Governments are expected to prepare a detailed works plan to accelerate agricultural growth rate by deploying both the funds provided as part of the State Plan Scheme and the Central assistance being provided as allocations from the Macro Management Approach adopted in respect of identified CSSs. Integration of CSSs under Macro Management Approach will enhance the productivity support programmes and accord greater flexibility to State Government to develop and pursue activities on the basis of regional priority. It is, thus, a major step towards achieving decentralization in pursuance of restoring primacy of States in agriculture development planning.

**Ministry of Environment & Forests (MOEF)**

22. The schemes implemented by the Ministry of Environment & Forests have relevance to sustainable eco-system development in rainfed / degraded areas in the country. MOEF merged

ongoing schemes i.e. Integrated Afforestation and Eco-development Projects Scheme, Area Oriented Fuelwood and Fodder Projects Scheme, Conservation and Development of Non Timber Forest Produce (NTFP) including Medicinal Plants Scheme and Association of Scheduled Tribe and Rural Poor in Regeneration of Degraded Forests into a single Scheme called National Afforestation Programme (NAP). The programme would be operated through Forest Development Agencies (FDAs). The new scheme was implemented in the first phase on pilot basis for the years 2000-01 and 2001-02 in some States. Based on the experience, it has been now decided to universalize the new scheme including all the above four schemes from the Tenth Plan.

23. Involvement of communities in planning and management of degraded forests is an integral part of the programme. The funds are proposed to be released direct to FDA, which are constituted as federation of Joint Forest Management Committees. The outlay for 2003-04 is Rs. 196.00 crore. It is proposed to cover an extent of 1.25 lakh ha of degraded forests through 250 new FDAs during the year.

### **Conclusion**

24. Programmes relating to conservation, development and management of land resources are scattered in different Central Ministries and Departments. In order to bring about an effective administrative mechanism to manage land resources in the country, all the land programmes / schemes would be brought under the umbrella of one coordinating agency. A National Policy on Land Resources Management for optimum management of land resources to meet socio-economic demands, creation of land database for effective planning and identification of hot spots of land degradation would need priority attention. Further existing village ponds, tanks and other water harvesting structure would be restored in a campaign mode by involving PRIs, NGOs and SHGs. Capacity building is needed for wasteland regeneration in Government and in user communities through training programmes and awareness campaigns.

## 8.5 KHADI AND VILLAGE INDUSTRIES

Employment generation has been accorded the highest priority in the Tenth Five Year Plan. Efforts would be made to create new jobs in rural areas to provide employment to rural people and to reduce exodus to urban areas for search of new employment. A target of creating 20 lakh new jobs in KVI sector has been kept for the Tenth Plan. The KVIC has initiated a number of new initiatives and was able to achieve generation of 66.30 lakh new job opportunities in 2002-03. The target for 2003-04 has been kept at 70.53 lakh new jobs. KVIC has introduced new designs and fashion in khadi cloth, better implementation of the Margin Money Scheme (also known as Rural Employment Generation Programme), introduction of appropriate technology in village industry units, adoption of higher and uniform quality standards for VSI products, cluster development of VIs, etc.

2. Khadi cloth production was 113.3 million sq. meters in 1998-99, which has declined to 95 million sq. meters in 2001-02. It has been observed that during recent past years, khadi cloth production and employment has gone down. The production and employment in village industries have shown growth and new job creation is reported mostly in village industries. The Performance of khadi and village industries may be seen at Annexure 8.5.1. Against the target of production and employment in khadi cloth of 59.50 million sq. mtrs. and 8.56 lakh persons respectively, the KVIC is expected to achieve the production of 63 million sq. mtrs. Which is valued at Rs.443.07 crore. In village industries, the anticipated achievement with respect to production and employment has been Rs. 7932.50 crore and 57.72 lakh persons respectively against the target of Rs.7680 crore and 60.00 lakh persons production and employment respectively. KVIC has introduced new designs and fashion inputs for khadi cloth with the help of National Institute of Design (NID) and National Institute of Fashion Technology (NIFT). These activities are expected to improve khadi demand to boost production and employment. The policy of providing rebate for khadi cloth would now be continued during the Tenth Plan period as recommended by the KC Pant Committee. Orders for 2003-04 have been issued by the Ministry of Agro & Rural Industries. Under the Rural Employment Generation Programme (REGP). 14.42 lakh new jobs were created and 1.40 lakh projects were sanctioned upto 31<sup>st</sup> March, 2002.

3. For the development of Village Industries, the KVIC has launched Sarvodaya Brand for its products. Toilet soaps, honey, agarbathi and pickle products would be covered under this brand. It is envisaged that this step would create a brand name for these products through a marketing network. KVIC has also taken steps to launch a new marketing company for the VI products. For organic food products, the new brand name of Desi Ahar is being introduced by the KVIC. R&D projects have been taken up to develop new range of products of herbal, essential oil, muslin khadi etc. At various national and international airports, KVIC is setting up display-cum-sales outlets at Kolkata, Mumbai, Delhi, Chennai, Bangalore and Goa airports to promote KVI products in Western countries. The Jamanlal Bajaj Central Research Institute (JBCRI), Wardha is being upgraded and modernised to establish as a national level R&D institute for KVI sector under the new name of Mahatma Gandhi Institute for Rural Industrialisation. KVIC has taken a number of policy decisions to accelerate the pace of improvement in khadi cloth production and employment generation in rural areas. To provide insurance to khadi artisans, a new Janashree Arogya Bima Yojana has been approved by the Government.

4. Margin Money Scheme (MMS) has been introduced by KVIC in 1995-96 to encourage setting up of new village industries. Under this scheme, funds upto 25 per cent of the project cost are provided as margin money to rural area beneficiaries for projects costing upto Rs.10 lakh. For projects costing between Rs.10-25 lakh, 10 per cent of the remaining cost of the projects is provided as margin money. For N.E. Region, beneficiaries from SC/ST women, ex-servicemen, physically handicapped persons, minority community, etc. margin money is provided upto 30 per cent of the project cost. The Rural Employment Generation Programme is under implementation by 27 Nationalised Commercial Banks, Regional Rural Banks and State KVIs. Utilisation of funds from consortia of banks is rather low and there is need to address this weak link. During 2002-03, KVIC has provided Rs.149.60 crore margin money advances to the public sector commercial banks and Rs.40.43 crore to the State KVI Boards, aggregating Rs.190.25 crore. Against this margin money/advances, the estimated mobilisation of bank loan was at Rs.457.30 crore approximately. Normally, mobilisation of funds from units is around 3 times of the funds made available by KVIC/GOI. Thus it has been observed that the KVI sector need to prove itself more credit worthy so that sufficient funds are mobilised from banks/FIs.

5. To provide insurance cover to khadi artisans, a scheme of Group Insurance in the name of Janashree Arogya Bima Yojana (JABY) has been approved by the Government. More than 4 lakh artisans are to be covered in the Tenth Plan. This scheme has been formulated by merging the Janashree Bima Yojana Policy of LIC with annual premium of Rs.200 per beneficiary with the the Jan Arogya Bima Yojana with annual premium of Rs.60/- per beneficiary. Under the insurance scheme, natural death cover of Rs.20,000/- while in the case of death due to accident, an amount of Rs.50,000/- would be payable to the nominee. The additional benefit offered to kahdi workers would be in terms of meeting the normal hospitalisation expenses for illness/disease/injuries to the extent of Rs.5000/- without clarifying whether this is a one time payment for the entire duration of insurance cover that may extend beyond 40 years of working life for an individual beneficiary. The annual premium of Rs.286/- per beneficiary would be share by LIC, Rs.100/- from Central Government Security Fund, Rs.93/- by Khadi Institution and Rs.46.50 each by khadi artisans and KVIC/GOI.

6. Based on the recommendations of the high level Committee under the Chairmanship of Shri K.C. Pant, Deputy Chairman, Planning Commission, a khadi package has been announced on 14.05.2001. Main features of this package consist of a rebate policy for five years, options of rebate as Market Development Assistance (MDA), insurance cover to khadi artisans, emphasis on improvement of khadi products, creation of packaging and design facilities, measures to promote marketing, land building, cluster development, focus on core areas and provision of additional working capital.

## Annexure 8.5.1

## Physical Performance Khadi &amp; Village Industries Annual Plan 2003-04

S. No	Industry/sub-Sector	Unit	2001-02 Actual	2002-03 (Anticipated)	2003-04 Targets
1	2	3	4	5	6
A	Production				
1	Khadi Cloth	Rs. crore	416.69	443.07	428.00
2	Village Industries	Rs. crore	7140.52	7932.50	8137.00
<b>B</b>	<b>Employment</b>	<b>Lakh Person</b>			
1	Khadi & Village Ind.		62.64	66.30	70.53

## Annexure 8.5.2

## Khadi &amp; Village Industries Outlays/Expenditure Annual Plan 2003-04

(Rs. crore)

S. No. Sub Sector	Industry/	2001-02 Actuals	2002-03 (BE)			2002-03 (RE)/Exp.		
			Outlay	BS	IEBR	Exp.	BS	IEBR
1	KVIC	182.18	392.00	392.00	—	130.00	130.00	—

2003-04 BE		
Outlay	BS	IEBR
392.00	392.00	—



## **8.6 RURAL WATER SUPPLY AND SANITATION**

The Tenth Five Year Plan envisages provision of safe drinking water on a sustainable basis to every settlement in the country and to take all possible measures for rapid expansion and improvement of sanitation facilities in the rural areas with local participation.

2. Whereas provision of safe drinking water and sanitation is a State subject and primary responsibility is of the State Governments, the Central Government has been supplementing the efforts of the State Governments in the form of financial assistance and technical guidance since 1976-77 by implementing a large scale Centrally Sponsored Scheme of rural water supply, viz. "Accelerated Rural Water Supply Programme" (ARWSP), subsequently also known as "Rajiv Gandhi National Drinking Water Mission". Based on the reports received from the State Governments by the Mission, out of a total of 14,22,664 identified habitations in rural areas, there were 15,798 left over "Not Covered" (NC) and 133305 "Partially Covered" (PC) habitations as on 1.4.2002. Besides, a large number of habitations, which are reportedly suffering from water quality problems, like excess fluoride, arsenic, salinity, iron etc, also need to be tackled. Thus, the task ahead is significantly large in terms of "No-source" villages/habitations, extent of quality and quantity problems of water supply to be tackled and more importantly the sustainability of the programme. As regards rural sanitation, a Re-structured Centrally Sponsored Scheme with involvement of local people and NGOs has been in operation since April 1999.

### **Review of Annual Plan 2002-2003**

3. The Annual Plan 2002-2003 included an outlay of Rs. 9532.03 crore - Rs. 6932.73 crore in the State and UT Plans and Rs. 2599.30 crore in the Central Plan for water supply and sanitation sector (including Urban Water Supply & Sanitation). The Revised outlay during the year was Rs. 9036.98 crore -Rs. 6638.23 crore in the State and UT Plans and Rs. 2398.75 crore in the Central Plan, as can be seen in Annexure 8.6.1 (these figures are including UWSS). The actual expenditure is not available for all the states.

4. On the basis of reports, furnished by the State Governments to the Rajiv Gandhi National Drinking Water Mission, 49434 villages/habitations have been provided with safe drinking water supply facilities during 2002-2003, against a total target of 63869 villages/habitations. The main reason for the shortfall is that the remaining NC habitations are in far-flung and remote areas and also the water is to be conveyed from distant sources to many habitations.

### **Annual Plan 2003-2004**

5. In keeping with the Tenth Plan objective, the Annual Plan 2003-2004 includes a large Plan Outlay under water supply and sanitation sector including Rs. 2906.25 crore (which includes UWSS) under Central Plan as can be seen in Annexure 8.6.1. The scheme-wise break-up of the approved outlays under Central Plan and State-wise details of the State/UT plans are indicated in Annexure-8.6.2 and Annexure-8.6.3 respectively.

## Rural Water Supply & Sanitation

6. For achieving the objective of providing safe drinking water supply to all rural habitations during the Tenth Five Year Plan (2002-07), the following prioritisation shall be adopted :

- i. Highest priority to be given to ensure that the remaining 15798 "Not Covered" habitations are provided with sustainable and stipulated supply of drinking water.
- ii. Equally important would be to ensure that all the remaining "Partially Covered" habitations having a supply level of less than 10 litres per capita per day (lpcd) as also those affected severely with water quality problem are fully covered with safe drinking water facilities on a sustainable basis.
- iii. Thereafter other "Partially Covered" and quality affected habitations are to be covered. The survey to identify quality affected habitations is still in progress.
- iv. After providing drinking water supply facility to all rural habitations as per the existing data by 2004, the remaining period of the Tenth Plan would be utilized for consolidation, i.e., coverage of newly emerged habitations and those which have slipped back to "Partially Covered" or " Not Covered" category due to variety of reasons.
- v. Simultaneously action is needed to identify and tackle habitations where water quality problems have been detected.
- vi. It should be ensured that SC/ST population and other poor/weaker sections are covered fully on a priority basis by the end of the Tenth Plan by a systematic survey of all such identified habitations to be carried out by the State Governments.

7. The stipulated norms of supply would be 40 lpcd of safe drinking water within a walking distance of 1.6 kms or elevation difference of 100 meters in hilly areas, to be relaxed as per field conditions applicable to arid, semi-arid, and hilly areas. At least one handpump/spot-source for every 250 persons is to be provided. Additional water in DDP areas for cattle to be provided, based on the cattle population.

8. In the States where 40 lpcd has been achieved in all habitations, the next step is to raise the level to 55 lpcd. Population/ distance/elevation norms for coverage may also be liberalized as per guidelines during the Tenth Plan in respect of States which have achieved full coverage as per the existing norms, subject to cost sharing by the beneficiaries.

9. The Annual Plan 2003-2004 includes a large outlay for rural water supply in the State/UT Plans. Besides, it includes Rs. 2585 crore for ARWSP and envisages to cover 11641 "Not covered" and 99121 "Partially-Covered" villages/habitations. State-wise details are shown in Annexure 8.6.4.

10. Rain Water Harvesting has been recognised as an important source of water, particularly in hilly regions of North-Eastern States, islands and water-stress areas. This will also help recharge the ground water aquifers and check the depleting ground water table, as also reduce severity of floods and quality problems of water, like fluoride, arsenic, salinity, etc. Concerted efforts, therefore, need to be made to construct rain water harvesting structures and conserve the rain water under/over the ground to help meet the water demand. A scheme for revival of one lakh traditional water sources has recently been approved.

11. Operation and maintenance of rural water supply is not satisfactory at present in most of the States and therefore, is an area of concern and needs special attention with the involvement of community, particularly the women. Some States like Tamil Nadu, Karnataka, Kerala, Andhra Pradesh, Maharashtra, West Bengal etc. have transferred the responsibility of O&M to Panchayati Raj Institutions, which are working better. All other States should also decentralise O&M and hand over to PRIs. Village Water & Sanitation Committee (VWSC) should be constituted as a Standing Committee of the Gram Panchayat and should play an active role in management of water supply schemes and sustainability of the sources. The recently introduced Swajaldhara component in ARWSP is a step in this direction.

12. Rural Sanitation programme is now gaining momentum in several States. The type of facilities to be provided would be decided, based on the need and full participation and involvement of Gram-Panchayats, the people, particularly the women and the NGOs. The programme of construction of low-cost household sanitary latrines will continue to get emphasis with priority on conversion of dry latrines into sanitary ones. The concept of total environmental sanitation needs to be adopted. For success of the programme, it may be necessary to ensure alternative delivery system also through "Rural Sanitary Marts", a commercial enterprise with social objective, which apart from being a sales outlet, also serves as a counselling-centre as well as a service-centre. The Annual Plan 2003-04 includes Rs. 165 crore for the Centrally Sponsored Rural Sanitation Programme (CRSP).

### **Externally Aided Water Supply & Sanitation Projects**

13. The World Bank is assisting various States in Water Supply and Sanitation Programme in rural areas. Currently 3 projects are under implementation. The disbursement budget estimate for 2003-2004 is about Rs. 240.05 crore, as can be seen in Annexure 8.6.5. Apart from these projects, several projects are also being funded by other External support Agencies like JBIC, KFW, EEC, DIFD, DANIDA, Netherlands etc.

### **Special Programmes Launched in 2002-2003**

14. The Prime Minister, in his Independence Day Speech on 15-08-2002 announced launching of three important programmes in the drinking water sector viz. installation of one lakh handpumps in water scarce areas, provision of drinking water facilities in one lakh primary schools and revival of one lakh traditional sources of drinking water. The Department of Drinking Water Supply formulated a Rs. 800 crore scheme for operationalising the above announcement which has been approved. While preparing the estimate the unit costs of installation of handpumps, school water supply scheme and revival of traditional sources have been taken as Rs. 34,750, Rs. 30,000 and Rs.15,250 respectively.

15. The Prime Minister on 25.12.2002 launched the 'Swajaldhara', where Panchayats/ communities will have powers to plan, implement, operate, maintain and manage water supply and sanitation schemes. The funding pattern is 90:10 (Centre: Beneficiary). About 20 % of the budget provision for Accelerated Rural Water Supply Programme is earmarked for this programme.

## Water Supply and Sanitation (Rural &amp; Urban) – Summary of Outlays / Expenditure

(Rs. Crore)

Scheme	2001-02 Actual Expdr.	2002-03		2003-04 Approved Outlay
		Approved Outlay	Revised Outlay	
<b>State &amp; UT's Plan</b>				
a) Rural Water Supply & Sanitation)	5518.62	6932.73	6638.23	NA
b) Urban Water Supply & Sanitation)				
Sub Total (State and UT's Plan)	5518.62	6932.73	6638.23	NA
<b>Central Plan</b>				
a) Ministry of Rural Development				
(i) Centrally Sponsored Accelerated Rural Water Supply Programme	1943.05	2235.00	2110.00	2585.00
(ii) Centrally Sponsored Rural Sanitation Programme	130.05	165.00	140.00	165.00
<b>b) Ministry of Urban Development &amp; Poverty Alleviation</b>				
(i) Centrally Sponsored Accelerated Urban Water Supply Programme for small towns with population less than 20,000	21.05	143.00	121.95	140.00
(ii) Centrally Sponsored Urban Low-cost Sanitation Scheme for liberation of scavengers	10.00	30.00	5.00	5.00
(iii) Other Schemes	50.00	26.30	21.80	11.25
<b>Sub-Total (Central Plan)</b>	2154.15	2599.30	2398.75	2906.25
<b>GRAND TOTAL</b>	7672.77	9532.03	9036.98	NA

Note:(i) The above mentioned figures do not include the funds released under the Non-Lapsable Central Pool of Resources for NER and Sikkim

## Annexure 8.6.2

**Water Supply & Sanitation (Rural & Urban) –  
Central Plan Scheme-wise outlay / Expenditure**

(Rs. Lakh)

Sl. Scheme No.	2001-2002 Actual Expdr.	2002-2003		2003-04 Revised Outlay	
		Approved Outlay	Approved Outlay		
<b>Ministry of Rural Development</b>					
1	Centrally Sponsored Accelerated Rural Water Supply Programme Including Rajiv Gandhi National Drinking Water Mission Programme	194305.5	223500	211000	258500
2	Centrally Sponsored Rural Sanitation Programme	13005.50	16500	14000	16500
<b>Sub-Total (MoRD)</b>		207311.04	240000	225000	275000
<b>M/o Urban Development &amp; Poverty Alleviation</b>					
1	Public Health Engineering Training Programme	0	130	130	125
2	Monitoring & Management Information System *	0	-	-	-
3	Research & Development *	0	-	-	-
4	Equity to HUDCO (WS Share)	2000	2000	2000	500
5	Centrally Sponsored Urban Low-Cost Sanitation Scheme for Liberation of Scavengers	1000	3000	500	500
6	Pilot Project on Solid waste management and drainage in few selected IAF air field towns in the country	0	500	50	500
7	Centrally Sponsored Accelerated Urban Water Supply Programme for small towns with population below 20,000 (as per 1991 Census)	2105	14300	12195	14000
8	Counterpart fund for external assistance to HUDCO from OECF (Japan) *	0	-	-	-
9	Support to Water Supply Scheme of major cities facing acute water Shortage (Ganga Barage at Kanpur) *	3000	-	-	-
10	Special new scheme for Water Supply *	0	-	-	-
11	Special new scheme for Solid Waste Management and Sanitation *	0	-	-	-
<b>Sub Total (MoUD&amp;PA)</b>		8105	19930	14875	15625
<b>Total</b>		215416.04	259930	239875	290625

• This scheme has been weeded out in the Tenth Plan

Note: (i) The above mentioned figures do not include the funds released under the Non-Lapsable Central Pool of Resources for NE States and Sikkim.

## Annexure 8.6.3

## Outlay/Expenditure on Water Supply and Sanitation (Rural &amp; Urban) – States and Uts

(Rs. Lakh)

Sl. No	State / UT	2001-02 Actual / Antici. Expenditure Total	2002-2003		2003-2004 Approved Outlay Total
			Approved Outlay Total	Revised Outlay Total	
1	2	3	4	5	6
1.	Andhra Pradesh	18264*	36083.00	35667	
2.	Arunachal Pradesh	2898	2950.00	3059	
3.	Assam	7042	6613.00	6613	
4.	Bihar	2603	6696.00	6884	
5.	Chhatisgarh	13504*	13530.00	13530	
6.	Goa	5628	10897.00	10897	
7.	Gujarat	62594*	79213.00	79213	
8.	Haryana	9185	8200.00	13117	
9.	Himachal Pradesh	12177	12590.00	11133	
10.	Jammu & Kashmir	13125*	13042.00	13042	
11.	Jharkhand	9000*	10020.00	10020	
12.	Karnataka	75741	52980.00	61327	
13.	Kerala	8216	17535.00	14500	
14.	Madhya Pradesh	15921	17885.00	17677	
15.	Maharashtra	39613	119364.00	119364	
16.	Manipur	3562	5186.00	5186	
17.	Meghalaya	2912	3375.00	2799	
18.	Mizoram	3258	2594.00	2718	
19.	Nagaland	3866	3241.00	3291	
20.	Orissa	7730	8533.00	9133	
21.	Punjab	6914	11524.00	11524	
22.	Rajasthan	23241	29905.00	26581	
23.	Sikkim	1714	2204.00	2231	
24.	Tamil Nadu	72342	82380.00	60559	
25.	Tripura	3101	3690.00	3690	
26.	Uttar Pradesh	40350	38480.00	21052	
27.	Uttaranchal	14153	9800.00	9800	
28.	West Bengal	16972	18776.00	18750	
29.	A & N Islands	2661.33	2577.00	2577	
30.	D & N Haveli	323.09	294.00	294	
31.	Daman & Diu	165.42	173.00	173	
32.	Delhi	50285	59287.00	63350	
33.	Lakashadweep	235.19	305.40	305.4	
34.	Pondicherry	1756.23	2196.09	2612.75	
35.	Chandigarh	810	1154.00	1154	
<b>Grand Total</b>		<b>551862.26</b>	<b>693272.49</b>	<b>663823.15</b>	

\* - RE Figures

## Status of Drinking Water Supply in Rural Habitations

Sl. No.	State/UT	Status as on 1.4. 2002				Coverage during 2002-2003					
						Target			Acheivement		
		NC	PC	FC	Total	NC	PC	Total	NC	PC	Total
1	2	3	4	5	6	7	8	9	10	11	12
1.	Andhra Pradesh	0	16023	53709	69732	0	8012	8012	0	3224	3224
2.	Arunachal Pradesh	329	893	3076	4298	327	446	773	28	86	114
3.	Assam	650	19719	50300	70669	536	5000	5536	160	3631	3791
4.	Bihar	0	0	105340	105340	0	0	0	0	0	0
5.	Chhatishgarh	0	0	50379	50379	0	0	0	0	2196	2196
6.	Goa	8	43	345	396	8	4	12	4	10	14
7.	Gujarat	96	1777	28396	30269	70	430	500	67	564	631
8.	Haryana	0	48	6697	6745	0	48	48	0	736	736
9.	Himachal Pradesh	1074	10252	34041	45367	500	1350	1850	500	1375	1875
10.	Jammu & Kashmir	1709	3576	5899	11184	850	1644	2494	198	100	298
11.	Jharkhand	484	132	99480	100096	200	49	249	200	28	228
12.	Karnataka	3	20533	36146	56682	1	7400	7401	1	6136	6137
13.	Kerala	783	6878	2102	9763	400	2000	2400	555	20	575
14.	Madhya Pradesh	0	0	109489	109489	0	0	0	0	2222	2222
15.	Maharashtra	2036	24405	59489	85930	1000	11810	12810	157	1285	1442
16.	Manipur	15	201	2575	2791	15	115	130	15	100	115
17.	Meghalaya	346	808	7485	8639	180	200	380	159	216	375
18.	Mizoram	0	461	450	911	0	180	180	0	180	180
19.	Nagaland	349	569	607	1525	195	50	245	127	29	156
20.	Orissa	0	0	114099	114099	0	0	0	0	0	0
21.	Punjab	1510	2197	9742	13449	750	1097	1847	321	389	710
22.	Rajasthan	6116	9434	78396	93946	1895	9105	11000	1156	10098	11254
23.	Sikkim	0	372	1307	1679	0	130	130	0	130	130
24.	Tamil Nadu	0	0	66631	66631	0	0	0	0	6628	6628
25.	Tripura	93	332	6987	7412	93	332	425	0	332	332
26.	Uttar Pradesh	0	0	243633	243633	0	0	0	0	0	0
27.	Uttaranchal	119	913	29976	31008	34	500	534	56	351	407
28.	West Bengal	0	13291	65745	79036	0	6650	6650	0	5618	5618
29.	A & N Islands	0	121	383	504	0	46	46	0	10	10
30.	D & N Haveli	38	242	236	516	31	110	141	8	5	13
31.	Daman & Diu	0	0	32	32	0	0	0	0	0	0
32.	Delhi	0	0	219	219	0	0	0	0	0	0
33.	Lakshadweep	0	10	0	10	0	10	10	0	0	0
34.	Pondicherry	40	75	152	267	40	26	66	0	23	23
35.	Chandigarh	0	0	18	18	0	0	0	0	0	0
Total		15798	133305	1273561	1422664	7125	56744	63869	3712	45722	49434

**Annexure 8.6.4 (Concl.)**

**Status of Drinking Water Supply in Rural Habitations**

Sl. No.	State /UT	Status as on 1.4. 2003				Target 2003-04		
		NC	PC	FC	Total	NC	PC	Total
1	2	13	14	15	16	17	18	19
1.	Andhra Pradesh	0	12799	56933	69732	0	12799	12799
2.	Arunachal Pradesh	301	807	3190	4298	301	807	1108
3.	Assam	376	16088	54205	70669	376	16088	16464
4.	Bihar	0	0	105340	105340	0	0	0
5.	Chhathishgarh	0	0	50379	50379	0	0	0
6.	Goa	4	37	355	396	4	37	41
7.	Gujarat	29	1213	29027	30269	29	1213	1242
8.	Haryana	0	0	6745	6745	0	0	0
9.	Himachal Pradesh	574	8877	35916	45367	574	8877	9451
10.	Jammu & Kashmir	1511	3476	6197	11184	1511	3476	4987
11.	Jharkhand	105	21	99970	100096	105	21	126
12.	Karnataka	0	13637	43045	56682	0	13637	13637
13.	Kerala	228	7444	2091	9763	228	7444	7672
14.	Madhya Pradesh	0	0	109489	109489	0	0	0
15.	Maharashtra	1879	23120	60931	85930	1879	23120	24999
16.	Manipur	0	101	2690	2791	0	101	101
17.	Meghalaya	187	617	7835	8639	187	617	804
18.	Mizoram	0	371	540	911	0	371	371
19.	Nagaland	72	744	709	1525	72	744	816
20.	Orissa	0	0	114089	114099	0	0	0
21.	Punjab	1189	1808	10452	13449	1189	1808	2997
22.	Rajasthan	4960	0	88986	93946	4960	0	4960
23.	Sikkim	0	216	1463	1679	0	216	216
24.	Tamil Nadu	0	0	66631	66631	0	0	0
25.	Tripura	93	0	7319	7412	93	0	93
26.	Uttar Pradesh	0	0	243633	243633	0	0	0
27.	Uttaranchal	63	562	30383	31008	63	562	625
28.	West Bengal	0	6752	72284	79036	0	6752	6752
29.	A & N Islands	0	111	393	504	0	111	111
30.	D & N Haveli	30	241	245	516	30	241	271
31.	Daman & Diu	0	0	32	32	0	0	0
32.	Delhi	0	0	219	219	0	0	0
33.	Lakashadweep	0	10	0	10	0	10	10
34.	Pondicherry	40	69	158	267	40	69	109
35.	Chandigarh	0	0	18	18	0	0	0
Total		11641	99121	1311902	1422664	11641	99121	110762



**Annexure 8.6.5**

**World Bank Assistance for Ongoing Rural Water Supply and Sanitation Projects**

(Rs. Crore)

Sl. No.	Name of the Project	Name of State	Total Cost Of the Project	Terminal Date Of Disbursement	External Assistance (Loans)	
					Cumulative Drawl upto 31.3.2003	2003-2004 BE
1	Integrated Rural Water Supply & Sewerage Project	Punjab	686.68	NA	-	0.050
2	Karnataka Rural Water Supply & Environmental Sanitation Project (Jal Nirmal Project)	Karnataka	NA	NA	449.730 (cumul. Expdr. upto 31.3.2003)	200.000
3	Kerala Rural Water Supply & Environmental Sanitation Project	Kerala	451.40	NA	37.41 (cumul. Expdr. Upto 31.3.2003)	40.00