

CHAPTER – VI

Agriculture & Allied Services

6.1 Agriculture

About 74% population of M.P. resides in rural areas. Around 65 percentage of the total land holdings belong to small and marginal farmers occupying only 26 percent of the cultivable land. The net sown area is about 147.90 lakh hectares. The gross cropped area is 202.16 lakh hectares. The ratio of Kharif to Rabi crops is 1: 0.79 during 2006-07. The total irrigated area of the State is 43.3 % and remaining area is rain fed. The cropping intensity of the State is 136%.

The State is divided in the following 11 Agro Climatic Zones: (1) Chhatisgarh plains (Balaghat district falls in this zone) (2) Northern hill region of Chhatisgarh (Districts of Shahdol, Mandla, Dindori, Anuppur, Umaria and part of Sidhi fall in zone) (3) Kymore plateau and Satpura hills (4) Central Narmada Valley (5) Vindhya Plateau (6) Gird region (7) Bundel Khand (8) Satpura Plateau (9) Malwa Plateau (10) Nimar Plains (11) Jhabua hills. Agro ecologically the state falls in three zones namely, Zone –VII (Eastern Plateau and hills Zone), Zone VIII (Central plateau and hills Zone) and Zone IX (Western Plateau and hills Zone)

The State has about 70 percent rain fed farming area. Erratic and uneven distribution of rainfall is the major constraint for achieving targeted level of production. Due to failure of rains, drought condition also prevails almost every year in one part or the other.

The major Kharif crops are: Paddy, Jowar, Maize, Bajra, Tur, Urad, Moong, Soybean, Groundnut and Cotton etc. The major Rabi crops are: Wheat, Gram, Lentil, Peas, Mustard and Linseed etc.

To facilitate execution of various programmes of department in a coordinated manner, all schemes are grouped into four categories. They are agriculture production, soil conservation, minor irrigation, and micro minor irrigation.

Comparison with other States And National Averages :

After the introduction of Soybean in 1980-81 some low value cereal crops have been replaced by Soybean and the percentage coverage of cereals started declining. In case of Pulses some change in the cropped area have been observed and the share of MP has been around 22.54% of national agriculture production. However, coverage of Oilseed crops has considerably increased during the period 1980-81 onwards and now M.P. is the largest producer of Soybean and Oilseeds. In spite of low level of irrigation, low fertilizer consumption, but due to better extension services and effective implementation of different agriculture programmes, **M.P. state place first in the country in the production of Pulses, Gram Oilseeds & Soybean.**

2.0 Performance of annual plan 2008-09

2.1 An outlay of Rs. 68,961.58.00 lakh was approved. The budgeted outlay was Rs. 20019.58 lakh. Total expenditure reported by the department was Rs. 30,859.32 lakhs. Out of which expenditure of Rs. 5756.90 lakh for TSP and Rs. 3456.03 lakh made under SCSP. Based on analyzing the targets and achievement of selected schemes, it was revealed that department has made satisfactory progress.

3.0 Review of Annual Plan 2009-10

3.1 The approved outlay for the annual plan 2009-10 was Rs. 62303.77 lakh. The budgeted outlay was Rs. 62977.00 lakh. Department has reported expenditure of Rs. 18766.99 lakhs by the oct.2009. Group wise detailed outlay is given below:

Table 6.1.2

(Rs in Lakh)

Group	Approved outlay 2009-10	Budget provision 2009-10	Actual Expenditure up to October 09
Crop Husbandry	57224.11	57868.84	16577.45
Research & Education	2091.30	2090.28	846.02
Soil Conservation	622.00	651.52	466.87
Minor Irrigation	426.36	426.36	133.68
Micro Minor	1940.00	1940.00	742.96
Total	62303.77	62977.00	18766.98

3.2 Physical Progress:

The target of food grain production for the year 2009-10 is fixed at 172.97 lakh tonnes. The Target for oilseeds is fixed 70.97 lakh tones. Targets are fixed after taking in to consideration the achievements made during past years and within the overall targets finalized for XI plan period.

The crop wise production targets for 2009-10 and estimated achievements of Kharif 09 are as following:

Table 6.1.3

(in Lakh Tonnes)

S.NO.	CROPS	Production Target 2009-10	Estimated Achievements (Kharif 09)
1.	CEREALS	130.25	32.49
2.	PULSES	42.72	6.45
3.	FOODGRAINS	172.97	38.94
4.	OILSEEDS	70.97	62.25
5.	COTTON	8.93	8.93
6.	SUGARCANE(GUR)	3.60	-

4.0 Annual Plan 2010-11

4.1 Objectives and strategies of eleventh five year plan are highlighted below:

4.1.1 To achieve 5% annual growth in agricultural output by increasing productivity:

- ❖ The end of the 11th plan the seed replacement rate of all major crops, and efforts will be made to bring it to the national level by the ten years.
- ❖ Use of hybrid and improved seed varieties will be encouraged in the state.
- ❖ The state is committed to implement scientifically advanced technology in agriculture.
- ❖ Special emphasis will be placed on the balanced use of NPK fertilizers to achieve the most favorable consumption ratio, from 10:7:1 to 4:2:1 by the terminal year of 11th plan.
- ❖ Efforts will be stepped up to raise steadily the fertilizer consumption level to be able to catch-up with the rest of the country by the ten years.
- ❖ Cultivated area will be increased and cropping intensity will be brought to 150% by the end of the 11th plan.
- ❖ Special emphasis will be laid on crop diversification and the cultivation of cash crops, particularly sugarcane, oilseeds and pulses.
- ❖ Core sector infrastructure including power and roads, will be leveraged and oriented to facilitate marketing of produce and increase the Profitability of agriculture.
- ❖ Rain fed farming will be made an economically viable proposition by adopting appropriate technology.

4.1.2 To enhance the incomes of all those dependent on the agriculture sector so that they attain reasonably satisfactory standards of living, including food and nutritional security;

- ❖ A comprehensive strategy for the replacement and diversification of low value crops to high value crops will be taken up. This will include renewed emphasis on horticulture.
- ❖ A large section of rural population consists of small and marginal farmers and landless laborers, who entirely depend on the agriculture sector for their livelihood. In addition to farm related activities, they will be encouraged to take up allied practices like dairying, poultry farming, Horticulture, fisheries aquaculture, piggery and apiculture, etc, to supplement their income.
- ❖ Opportunities for round the year gainful employment, for farm laborers, will be created, in the village itself.

4.1.3 To promote sustainable agricultural development through efficient management of land and water resources, using farming systems and watershed development approaches;

- ❖ The State will promote agro-forestry, social forestry and the reclamation of wastelands lands and degraded and through community participation with satisfactory rights to the community. Suitable legislation will be enacted to achieve these ends.
- ❖ The use of water resources would be optimized.

- 4.1.4 To provide farmers with appropriate technology, and necessary inputs, services and incentives;**
- ❖ The state will make efforts to leverage the current developments in the areas of biotechnology, farm mechanization, and information technology.
 - ❖ Farmers will be provided appropriate technology for minimizing the pre and post harvest losses.
- 4.1.5 To strengthen the cooperative infrastructure to provide easier access to agricultural credit and inputs;**
- ❖ An effective strategy would be put in place to increase the availability of rural credit for short and long term needs.
 - ❖ The State is committed to strengthen District Cooperative Banks, so that they are able to meet out increasing demands of farms loans.
 - ❖ The interest rates on farm loans will be rationalized in a manner that credit from banks is available on reasonable interest rates. The loan portfolio of banks will be broadened, so as to make available the loans for purposes other than for agricultural purpose to the farmers on easy terms.
 - ❖ The practice of converting surplus into saving and to plough it back into investment in the Rural Sector will be encouraged and the problem of rural indebtedness will be frontally addressed.
- 4.1.6 To refocus extension activities to emerge as a potent conveyance to acquaint farmers with National & International market demand and developments in agricultural practices, and the transfer of appropriate technology;**
- ❖ Training practices will be revamped and integrated to bring them in line with the objectives of this policy.
 - ❖ The existing public extension system would be replaced by a multi agency extension system.
 - ❖ It is also recognized that women farmers and local self help groups have played an increasingly important role in promoting profitable farm practices within the community. Therefore, suitable empowerment will be provided to these groups.
- 4.1.7 To ensure the involvement of Panchayat Raj Institutions in the decision-making process to enhance agriculture production;**
- ❖ Community participation is an integral part of decision-making at the field level and the Panchayats will take steps for introduction of new initiatives, both locally and at the State level, through the Gram Sabhas village Agriculture Standing Committees, Kisan Bandhus etc.
- 4.1.8 To promote increase in exports of those agricultural commodities in which the State has a competitive edge;**
- ❖ The policy will lay emphasis on the development of Agri Export Zones (AEZs), processing and storage infrastructure, and Research and Development activities for this purpose.
- 4.1.9 To strengthen the Research and Education Infrastructure;**
- ❖ Educational and research infrastructure will be brought at par with international standards.

- ❖ The State will support biotechnological research, with greater emphasis on adaptive research.

4.1.10 To promote Organic Farming;

- ❖ Balanced and integrated use of biomass, organic and inorganic fertilizers will be promoted. Use of chemicals in agriculture would be continuously monitored and controlled to attain sustainable agricultural production by launching a statewide Programme.
- ❖ Use of locally available biodegradable waste, bio-fertilizers, and bio-pesticides shall be encouraged to promote eco-friendly and tourism friendly agriculture.
- ❖ Accredited testing and certification facilities will be established for organically grown agri-produce.
- ❖ Organic farming will be structured so that it will have a direct impact on improving rural sanitation.

4.1.11 Risk Management

- ❖ All farmers will be encouraged to get their crops insured under National Agriculture Insurance Scheme.
- ❖ Government of India will be persuaded to bring all crops under the Insurance cover, irrespective of area coverage and the Patwari Halka to be the crop yield estimation unit for all crops.

4.1.12 To integrate the roles of the core sectors of power and irrigation and their synergies to increase Agricultural Production;

- ❖ The State Government has put in place a perspective plan to increase the irrigation.
- ❖ This will be in addition to the commitment of the state Government to repair and upgrade the existing infrastructure.
- ❖ The existing generation facilities will be repaired and upgraded.

4.1.13 Public Private Partnership

As per the guidance of government of India for agriculture extension reforms, state has exercised practices for promotion of Public Private Partnership in betterment of agriculture extension services.

4.2. STRATEGY FOR IMPLEMENTATION:

4.2.1. With the objective of increasing the agriculture production and productivity in five years. Creating more employment opportunity and convert present marginal employment in to full employment by raising productivity particularly helping small and marginal and women farmers and doubling the agriculture credit following strategy for will be adopted to achieve the plan target.

4.2.2. Organic farming drives in M.P.

- ❖ First seeded in 1969 at KASTURBA GRAM Indore where entire 2000 hect. Farm transformed to ORGANIC Farming.
- ❖ Focused workshop, seminars, farmers fare camps etc. on organic farming during late seventies for awareness.
- ❖ Extensively adopted organic farming in the state during and nineties through several special programmes.

- ❖ Since 1998-99 fifty percent area in government farms put under organic farming.
- ❖ Based on satisfactory result of trials (between organic and inorganic), applied the technologies in important crops like pulse, oilseeds etc.
- ❖ Popularized organic manure production in bio-village by introducing vermi compost, nadep compost, phospho compost, bio gas slury, green manuring, blue green algae etc.

4.2.3. Integrated Approach: Integrated approach for increasing food production and farm income by contact village concept: -

- ❖ 2 villages will be adopted by each village extension worker (VL) with the total strength 7838.
- ❖ Capacity building of key communicators in the village (Kisan mitra & Kisan Saheli).
- ❖ Involvement of 'Kisan Mitra ' & 'Kisan Saheli' in extension activity as well as in establishing agri clinic & agri business centres.
- ❖ Extension training through SETCOM, HELLO AKASH WANI, GRAM MANAGAL (DD1), KISAN CALL CENTRE.
- ❖ Formation of Agri. Extension groups as well as self help groups for employment generation.
- ❖ Strengthen the extension programme through farmer's Field school by establishing in village level.
- ❖ Extend out the contract farming.
- ❖ Encourage the produces company.
- ❖ Provide the Institutional loan and Insurance to all farmers in the Agriculture sector.

4.2.4. Improvement-Indicators

1. For increasing agriculture production and productivity action plan has been prepared agro-climatic zone wise.
2. Increase in fertilizer consumption zone wise target have been fixed in such way that state consumption of fertilizer per unit cropped area will nearly reach to the national level.
3. Self sufficiency in certified seed - seed replacement rate to be enhanced to 16% in the XIth Five year plan and 30% by the 10 years by seed village program and seed rolling plan . Also seed production programme will be taken up in large scale in Govt. farms and through cooperative seed grower society.
4. Increase in irrigation: 5% increase in irrigated area by mean of developing Govt. and private irrigation resources with coordination between agriculture, rural development and water resources department.
5. Increase in cropping intensity: To reach the level 170% cropping intensity by ten years from the present level of 136%.
6. Comprehensive Agriculture Extension for transfer of technology: Following activity will be taken up on priority basis.
 - Educating farmwomen in agriculture practices.
 - Farmers training and visit of small and marginal farmers.
 - Use of modern communication system.
 - Private participation in extension.
 - Adherence to low cost technology Agriculture

7. Strengthening of skill of staff & farmers:
- Provide the training facility for up gradation, refreshment & orientation of knowledge & skill of staff.
 - Provide the training for farmers & women farmers and farmers of SC/St for awareness, up gradation of knowledge of about new low cost agriculture technologies.

4.2.5 Bundelkhand Special Package :

Special package for bundelkhand region has also been provided. The proposed outlay for this special package for 2010-11 Rs. 12739.75 lakh against which Rs. 10192.05 lakh is allocated in normal Rs. 2547.70 lakh is allocated in SCSP.

- 4.3. Keeping the above objectives and strategies, the plan outlay is Rs.81689.39 lakh for the annual plan 2010-11. Out of which Rs. 15250.65 Lakh and Rs. 14394.66 lakh has been provided for tribal sub plan (T.S.P.) and scheduled castes sub Plan (S.C.S.P.) respectively. Group wise detail is given in below table:

Table 6.1.4: Group wise Outlay

(Rs. in Lakhs)

S.No.	Groups	Total proposed outlay for 2010-11	Out of which		
			Normal	T.S.P.	SCSP
1.	Agriculture production	75013.52	47537.12	14260.78	13215.62
2.	Research & Education	2755.88	1206.24	654.98	894.66
3.	Soil Conservation	849.12	770.02	79.10	0.00
4.	Minor Irrigation	540.17	0.00	255.79	284.38
5.	Micro Minor Irrigation	2530.70	2530.70	0.00	0.00
	Total	81689.39	52044.08	15250.65	14394.66
	% of flow		65.50%	17.93%	16.57%

4.4. Physical targets proposed:

The proposed target for food grain & Oilseeds for the annual plan 2010-11 are 170.90 and 76.03 lakhs tones respectively. These targets are proposed after taking in to consideration the achievements made during past years and within the overall targets finalized for XI th plan period.

The proposed production targets for the annual plan 2010-11 are given in table 09.

Table 6.1.5

(in Lakh Tonnes)

S.NO.	CROPS	Production Target 2010-11
1.	CEREALS	127.98
2.	PULSES	42.92
3.	FOODGRAINS	170.90
4.	OILSEEDS	76.03
5.	COTTON(Lakh Bales)	9.60
6.	SUGARCANE(GUR)	3.71

5.0 Details of important schemes

5.1. Agriculture Production:

A. Agriculture Production

Schemes under agriculture production group mainly aims at increasing production and productivity of food grains (cereals/pulses), oilseeds, cotton and sugarcane and other cash crops through dissemination of latest technology by use of organic farming, increasing the seed replacement, use of balanced dose of fertilizer. For this purpose, centrally sponsored schemes like Macro management plan (6 Schemes), ISOPOM (National Pulse Development Programme, Oilseeds Production Programme, Accelerated Maize Dev. Programme), Intensive Cotton Development Programme, ATMA and Central sector schemes like Agrisnet, seed village programme, organic farming, Demonstration of improved agriculture implements. National food security mission and Rashtriya Krishi Vikas Yojana are being implemented in this group

Important state sector schemes like Surajdhara, Annapurna scheme, training and extension, biogas development, national crop insurance scheme, participation of women in agriculture, special training program of SC/ST farmers for skill development and employment generation, are being implemented.

The state has separate Directorates for Horticulture and Agriculture Engineering. The schemes for promotion of growing vegetable, fruits, land scaping and Farm Mechanization respectively (under Macro Management) pertaining to Agriculture Engineering are accommodated in this group. The details of main scheme under this group is as follows-

Important Centrally Sponsored Schemes are given below under crop husbandry:

1. Macro Management Plan:

The Macro management plan is being implemented from 1st January 2001. This is a Centrally Sponsored Scheme. The cost sharing pattern by Government of India and state is in the ratio 90:10 respectively. GOI share includes 8-% Grant and 20% Loan with a recovery period of 20 years including five year moratorium. In the year 2007-08 only 6 schemes of Agriculture Department and 01 scheme of Agriculture Engineering Department are implementing under the Macro Management Plan. They are as follows :

1. I.C.D.P. (Coarse Cereal +Rice)
2. Sustainable Dev. of Sugarcane
3. Balance and Integrated use of fertilizer with integrated Nutrient Management (I.N.M.)
4. NWDPR
5. R.V.P./FPR
6. Augmentation of Groundwater.
7. Promotion of Farm Mechanization (Agriculture Engineering department)

2. Integrated Scheme Of Oilseeds, Pulses, Oilpalm And Maize (ISOPOM)

To provide flexibility to the states in implementation of these programmes, based on regional priorities, schemes are merged in to one Centrally Sponsored scheme "Integrated Scheme of Oilseeds, pulses, Oil Palm and Maize (ISOPOM)". The cost

sharing pattern by Government of India and state is in the ratio 75:25 respectively. In the state this scheme is being implemented since first April 2004. The merged schemes are as below:

- b. Oil Seeds Production Programme :**
- c. National Pulse Programme :**
- d. Accelerated Maize Dev. Programme :**

3. Intensive Cotton Development Programme :

The scheme is in operation in 14 district Viz. Dhar, Khandwa, Bhurhanpur, Khargone, Jhabua, Ratlam, Mandasaur, Dewas, Badwani, Shajapur, Betul, Sehore, Harda and Chhindwara. Under this scheme subsidy is provided on production of foundation seeds, distribution of certified seeds, distribution of plant protection equipments, front line demonstrations, subsidy on sprinkler set and training programme etc. The cost is shared by Government of India and state in the ration of 75:25 respectively.

4. Support to State extension programme for extension reforms through Agriculture Technology Management Agency (ATMA).

As per the guideline of Government of India for Agriculture Extension Reform, State has exercised practices of promotion of Public Private Partnership in Agriculture Extension services and currently 8 partners are working under this programme, the innovative activities under PPP are-

- a Kisan Call Center (KCC) :** A Kisan call center has been established by the NGO partner ISAPP at Bhopal. Farmers can access the latest information of Agriculture by using the toll free number 18002334499.
- b Community Radio Station (CRS) :** A community radio station has been established at the Sirounj block of Vidisha district, under ATMA-PP by the partner ISAP.
- c ATMA Sandesh** is published monthly and distributed to all the field offices in all 48 districts and to Kisan Mitra and Kisan Didi.
- d Physical Progress under ATMA :** Demonstration 9698,684 Farmer field school, 47 agriculture fair and 110 training has been conducted up to July 2008.

Important State sector schemes are given below under crop husbandry:

1. Surajdhara Scheme :

The main objective of this scheme is to encourage the Scheduled caste/Scheduled Tribe farmers to adopt cultivation of productive of oil seeds and pulses instead of low productive millet. The main components of the scheme are as follows:

- ❖ Seed Exchange
- ❖ Seed Reliance
- ❖ Seed Production

2. Annapurna Scheme:

The main objective of this scheme is to encourage the scheduled Caste/ Scheduled Tribe farmers to adopt cultivation of cereal crops instead of low productive millet. The major components of the scheme are as follows;

- ❖ Seed Exchange
- ❖ Seed Reliance
- ❖ Seed production

3. National Agriculture Insurance Scheme:

The Scheme has been implemented in whole state since 1999-2000 as per norms fixed by Government of India. The scheme is implementing through "The Agriculture Insurance Company of India Limited". The objectives of the scheme are as under:

- ❖ To provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests & diseases.
- ❖ To encourage the farmers to adopt progressive farming practices, high value in-puts and higher technology in Agriculture
- ❖ To help stabilize farm incomes, particularly in disaster years.

4. Strengthening of Machine Tractor Station:

Directorate of Agriculture Engineering is implementing this scheme. This is supportive scheme of Machine Tractor state scheme (MTSS) for farmers of weaker sections. This scheme breaks the monopoly of private tractor operators providing tractors at exceptionally higher rates. Under MTSS scheme tractors alongwith implements are provided on custom hiring basis to farmers for performing different agricultural practices.

5. Information and communication support Agriculture Production Programme:

To extend out the new agricultural technologies farmers fare exhibitions are organized in this scheme.

6. Staff Training for Agriculture Engineering Directorate :

In this scheme the staff of Agriculture Engineering Directorate has been trained about the innovations which improving the quality of execution and providing transparency to work. For the fast and best quality implementation schemes. Information Technology in Agriculture Engineering is also executed in this scheme.

7. Participation of women in agriculture :

Women play a vital role in agricultural production process. They do most of the work at every stage of production. Their contribution is estimated to be 70% so that a new scheme "Participation of women in Agriculture" is launched in the 11th five year plan for skill development, awareness, knowledge up gradation and employment generation of farm women. The major activities of MAPWA scheme are bench mark survey, technical training, follow up visits, self help group formation, training for staff and farm women, special training resource development

8. Special training for SC/ST farmers:

The state of Madhya Pradesh has the largest SC/ST concentration in India. The tribal population of the state is 19.94% and the population of Scheduled Caste is 15.40%. The farmers of SC/ST caste are mostly small, marginal and landless labourers. So that to improve the techno socio-economic condition, skill up gradation and

employment generation the scheme of "Special training for SC/ST Farmers" is implementing since 2007-08 in the 11th five year plan.

The main components of the scheme are training of Kisan mitra and Kisan didi, training of landless laborers, women farmers farmers interstate and with in state visit, seminar, workshop, interface and Kisan Mela.

9. Subsidy on bullock carts:

A new scheme of subsidy on bullock cart for farmers is launched in the 11th five-year plan according to Hon'ble Chief Minister's announcement. Bullock cart plays major role in the transportation of goods in the interior of village. Govt. of M.P. has started the scheme "Subsidy on bullock cart in the year 2007-08. Under this scheme poor farmers are the beneficiaries, who can avail the benefit of the scheme. Farmers who have bullock can get bullock cart on 50% subsidy under this scheme.

10. State Institute of Agriculture Extension & Training (SIAET)

State department of Agriculture M.P. has its own state Institute of Agriculture Extension & Training (SIAET) located at Bhopal. This Institute has its own well equipped Administrative Block, Hostel and Press etc. which covers an area of 7 acres. This institute is also running totally from state funds. GOI has recently allocated small funds for this institute like in Agri. Extension Reform Project wherever like other institutions at least to the tune of 1 crores every year should be separately provided. The main activities of this institute are to impart training to staff and farms, conducting Seminars and workshops etc. The SIAET has been declared Autonomous body by the state Government to vide order Bo. B-6/2/06/14-2 dated 20.12.07. Presently this institute executing many important scheme like Food Security Mission, ATMA, Bamboo Mission etc.

11. Information Technology in Agriculture:

The process of Agriculture Extension is being modernized to handle the quantum of work as well as the challenges and rapidly increasing needs of farmer coming up with greater speed. The modern agriculture extension has also to have speed up and synchronize according to changing information environment so as to help farmers effectively.

With this intension GOI has started a state sponsored scheme name AGRISNET under which state governments have been provided grants for hardware, Customized Application software Development & training of stake holders. To address the sustenance of AGRISNET project for further Operation Management and maintenance of infrastructure so created, state Government has proposed a State Sector Scheme "Information technology in Agriculture Krishinet" from April 2008 under 11th five year plan.

The following activities are planned in the scheme under 11th five year plan. The main components are –

- ❖ Human Resource Development (Staff and other stake holders).
- ❖ Creating awareness amongst farmers and regular training include refreshers and training of new staff/other stake holders.
- ❖ Maintenance of Farmer Information Center :

- ❖ Electricity water and consumables including computer stationary to maintain the Farmer information center at departmental offices established under Agrinet and RKVY.
- ❖ Operation management.
- ❖ Hiring expert professional services for setting up a facility centre for managing the application, regular technical work like application management, Database administration and network support services.
- ❖ Up gradation and development.
- ❖ Enhancements in the software to cover financial management; accommodate changing requirement of department and to incorporate change of technology.
- ❖ Connectivity and hosting.
- ❖ For internet connectivity up to block level (will shift to SWAN/NIC when available).
- ❖ Miscellaneous (Including Consultancy Services)
- ❖ Consultancy, insurance, disaster management, security related audit and evaluation.

Important Center sector schemes are given below under crop husbandry:

1. Seed Village Scheme: The aim of the Scheme is to produce quality seed and improvement in facilities for distribution. The scheme will be implementing with 100% assistance from GOI.

Implementation Agency: The scheme will be implemented through Agriculture department, Agriculture University, seed and Farm Development Corporation and Seed certification agency.

Implementation of Scheme: The scheme will be implemented in these villages where the participant cultivators are 50-100 numbers.

Distribution of foundation seed: Seed will be made available to a cultivator on 50% subsidy for an area of half acre through authorized agency.

2. National Food security Mission:

The National Development Council (NDC) in its 53rd meeting held on 29th May 2007 adopted a resolution to launch a food Security Mission comprising Rice , Wheat and Pulses to increase the production of rice by 10 million tons, wheat by 8 million tones and pulses by 2 million tones by the end of the Eleventh plan (2011-12). Accordingly central sector scheme National Food Security Mission". has been launched from 2007-08 to operationalise the above mentioned resolution.

The National Food security Mission will have three components-

- ❖ National Food security mission - Rice (NFSM-Rice), District 9 (Damoh, Panna, Rewa, Satna, Dindori, Katni, Mandla, Shahdol & Annopur).
- ❖ National Food Security Mission – Wheat (NFSM-Wheat) District 30 (Damoh, Panna, Rewa, Rewa, Satna, Dindori, Katni, Mandla, Shahdol, Dewas, Guna Jabalpur, Raisen, Shivpuri, Tikamgarh, Vidisha , Jhabu, Sagar, Rajgarh, Seoni, Chhatarpur, Ujjain, Betul, Bhind, Khandwa, Harda, Indore, Sehore, Sidhi, Balaghat & Dhar)
- ❖ National Food Security Mission – Pulses (NFSM-Pulses) District 20. (Damoh, Panna, Rewa, Satna, Dewas, Guna, Jabalpur, Raisen, Shivpuri, Tikamgarh,

Vidisha, Jhabua, Sagar, Rajgarh, Seoni, Chhatarpur, Ujjain Chhindwara, Narsinghpur & Shajapur).

Mission Objectives:

- ❖ Increasing production of rice, wheat and pulses through area expansion and productivity enhancement in a sustainable manner in the identified districts of the country.
- ❖ Resorting soil fertility and productivity at the individual farm level.
- ❖ Creation of employment opportunities and
- ❖ Enhancing farm level economy (i.e. far profits) to restore confidence among the farmers.

3. Rashtriya Krishi Vikas Yojana (RKVY):

The RKVY aims at achieving 4% annual growth in the agriculture sector at National level during the XI th plan period, by ensuring a holistic development of Agriculture and allied sector. The main objectives of the scheme are:

- ❖ To incentive the state so as to increase public investment in Agriculture and allied sector.
- ❖ To provide flexibility and autonomy to states in the process of planning and executing agriculture and allied sector schemes.
- ❖ To ensure the preparation of agriculture plan for the districts and the states based on agro-climatic conditions, availability of technology and natural resources.
- ❖ To ensure that the local needs/crops/priorities are better reflected in the agricultural plans of the states.
- ❖ To achieve the goal of reducing the yield gaps in important crops, through focused interventions.

A. Research & Education:

The state has one Agriculture University JNKVV and a number of KVK and ICAR Research institutes which are providing the Research, Extension & Training support to enhance the productivity of crops. The main activities are:

❖ **Germplasm Conservation & Management of Various Crops:**

The Vishwa Vidyalaya will maintain the germplasm collections of 32 field crops, about 25 vegetables and 15 fruits plants, 30 medicinal plants, 6 aromatic plants and 50 flowering plants. Altogether more than 1000 varieties are being maintained at 26 research stations for the purpose of seed production Programme. Apart from this a large number of germplasm has been collected and maintained. Medicinal and aromatic plants, fruit crops and fruit plant saplings in vegetables etc. have been maintained.

❖ **Crop Improvement Programme:**

Genetic Improvement Programme on various crops will be continued in field crops, vegetables and medicinal and aromatic plants in different centers of the Vishwa Vidyalaya by utilizing the existing genetic resources. This may lead to the development of high yielding varieties of different crops suited to various agro climatic zones of Madhya Pradesh. About 56 varieties of 27 field

crops & vegetables cultivated during the year 2006-07 has been developed by now.

❖ **Nucleus and Breeder Seed Production:**

Vishwa Vidyalaya will produce the nucleus and breeder seeds of field crops of around more than 20,000 quintals to meet the requirement of the State. Apart from this, a massive Programme of production of seeds of vegetables, spices, medicinal and aromatic plants, and fruit plant saplings is being implemented that adds the new dimension to the seed Programme. Vishwa Vidhyalaya got the first position at national level for excellent nucleus and Breeder seed production.

B. Research in the Agriculture and Animal Biotechnology, Food Technology and Forestry

C. Participation of state in All India Coordinated Research Projects funded by the Indian Council of Agricultural Research

D. Education: Under plan scheme, new colleges of agriculture science has been established at Ganjbasoda, animal husbandry, and veterinary college at Rewa; college of horticulture at Mandsour; department of food science and department of forestry at Jabalpur and centre of Biotechnology and agriculture management at Jabalpur.

1.5.2. Soil & Water Conservation:

The objective is insitu moisture and soil conservation; extension of recommended production technologies, scientific management and sustainable use of natural resources and labour oriented development activities for employment generation through agricultural enterprises.

1.5.3. Minor Irrigation:

With a view to enhance productivity and production of holdings with S.C. and S.T. families, the scheme for Boring of tube wells on cultivator's field has been continued. For efficient utilization of irrigation water sprinkler sets and drip units are also being subsidized under different centrally sponsored schemes.

1.5.4. Micro Minor Irrigation (Balram Talab):

Balram talabs are being constructed under Micro Minor Irrigation Programme.

6.2 Horticulture

The Horticulture crops offer sunrise opportunities of the development of the small and marginal cultivators by providing quick and regular income due to high productivity and high value produce in comparison to food grains.

Importance of fruit and vegetables in human nutrition is well known. Vegetables and fruits are rich and comparatively cheaper source of vitamins and minerals. According to W.H.O. study report say that per capita requirement of fruits and vegetables is 90 grams and 250 grams respectively per day, but in our country per capita availability is only 27 grams of fruits and 85 grams of vegetable, which is much below the prescribed requirement.

In the country where population is predominantly vegetarian, the nutritional demand can only be achieved by increasing the production of fruits and vegetables. Horticulture offers great opportunity for generating employment and above all providing nutritional security to the people besides supplementing the income of producers.

The department of Horticulture is vested with the responsibility of development of Horticulture in the state. Besides, programmes being implemented by the department, linkages have also been established with NHB and GOI for their sponsored schemes.

Gross irrigated area of the state is about 42.85 lakh hectares and area under horticulture crops is about 6.45 lakh hectares.

2.0 Performance of Annual Plan 2008-09

- 2.1. An outlay of Rs. 6887.84 lakh was approved for Annual Plan 2008-09. The budgeted outlay was Rs. 7561.00 lakh has been provided by finance dept. The expenditure reported by the department was Rs. 7315.10 lakh. However, the financial performance of the department found satisfactory.
- 2.2. Based on analyzing the targets and achievements of schemes it was revealed that department has made satisfactory progress related to intensive fruit development, new garden establishments and production of bananas.

3.0 Review of Annual Plan 2009-10

- 3.1. The approved outlay for the annual plan 2009-10 was Rs. 7663.40 lakh and budgeted outlay was Rs. 8232.97 Lakh against which department reported Rs. 1519.99 Lakh till Oct. 2009 and the anticipated expenditure will be 100% by the year end.
- 3.2. There is tremendous scope of horticulture development in the state .the annual plan ceiling for the year 2009-2010 is as follows:

S.No.	Scheme	Plan Ceiling (lakh)
01	State sector scheme	4238.19
02	State share for central share scheme (NHM)	1663.00
03	State share for central share scheme (MIS)	2500.00
04	RKVY for central sector scheme	2400.00
	Total	10801.19

3.3 All the activities of the year 2008-09 has been continued in the year 2009-10 besides some amended schemes like, distribution of seeds of Hybrid chillies and some new schemes related to food processing. Due to paucity of fund and lack of manpower desired progress could not be achieved by department.

4.0 Annual plan 2010-11

4.1. All the activities of the year 2009-10 will be continued in the year 2010-11. The outlay for the annual plan 2010-11 is Rs.12543.00 lakh against which Rs. 8039.72 lakh is allocated in normal; Rs. 2780.17 lakh is allocated in TSP and Rs. 1723.11 lakh is allocated in SCSP.

5.0. Details of schemes are given below:

5.1. Administration

- ❖ **Integrated Horticulture development scheme:** State and district level staff has been sanctioned and working under the scheme who implements and monitor the different schemes.
- ❖ **Intensive Fruit development programme:** Under the Tribal Sub Plan staff for the seven district and 16 nurseries is sanctioned.

5.2. Fruit Development Programmes

- ❖ **Establishment of New Garden & Nurseries:** Production of quality planting material is most important component for the improvement of production and productivity for the Horticulture crops. For this purpose 217 nurseries are established at block level.
- ❖ **Production of Banana:** Tissue culture of Banana is being supplied on subsidized cost to the farmers for higher production than traditional planting material.
- ❖ **Subsidy on Fruit Plantation:** The area expansion of fruit crops is being taken up under the scheme. Subsidy is given in the shape of planting material and other inputs @ 25 percent cost norms fixed by NABARD.

5.3. Vegetable Development Programme

- ❖ **Potato development:** Research is being done for the improvement of production and productivity. For dissemination, the latest development of technology to the farmer, field demonstrations of Potato are organized at free of cost.
- ❖ **Integrated Vegetable Development Programme:** To fulfill the higher demand of fresh vegetables of the urban people, this scheme is providing assistance to the farmers. The assistance is given in the shape of subsidized improved seed quality.
- ❖ **Establishment of vegetable seed multiplication farms:** State has established 7 vegetable seed multiplication farms where foundation and certified vegetable seed is produced. This seed is being supplied to the farmers on the reasonable cost for improved productivity.
- ❖ **Kitchen Garden (Baadi) scheme:** This scheme has been started from the year 2000-01 under the flagship programme. Vegetable seed packets worth Rs. 50 /- each, is distributed free of cost to the small-marginal and landless labourers living BPL to fulfill their nutritional requirement and additional income. Year wise distribution of vegetable seed packets is below:

- ❖ **Spice Development:** The area under spices/condiments crops is about 3.31 lakh ha. with a production of 3.08 lakh tons. The improved quality seed minikits of coriander, chilies, ginger, turmeric, and garlic is being distributed under the demonstration component.

5.4. State share under centrally sponsored scheme:

5.4.1. National Horticulture Mission: This scheme has been launched as to promote holistic growth of the horticulture sector through an area based regionally differentiated strategies.

5.4.2. Micro Irrigation: The objective of the scheme is to increase the coverage of area under micro irrigation in the country for improving productivity of horticultural crops with efficient use of water resources. Therefore, micro irrigation needs be promoted in a holistic manner involving appropriate cultivars, good agronomic practices, post harvest handling, processing and marketing leading to an end-to-end approach.

It is proposed to provide financial assistance @ 50% of the unit cost for various of crops. The financial assistance of 50% would be jointly shared between the centre and state governments in the ratio of 80:20. In other words, 80% share (40% of unit cost) will be met by the centre, and 20% (10% of unit cost) will be met by the respective states. The beneficiaries may have to contribute the balance 50% of the unit cost, either through his/her own resources, or through soft loan(s) from any financial institutions.

6.3 Animal Husbandry & Dairy Development

Madhya Pradesh accounts for about 10.21 % of total cattle population and 6.3% of the total milk production in the country. Livestock sector alone contributes 12.5% of the overall GSDP at current prices. The agro climatic conditions are conducive to development of not only dairy and poultry sector but also to development of sheep, goat and pig rearing. Bullocks of Nimari, Kenkatha and Malvi breeds of M.P. are known for their superior draught power.

Table 6.3.1 As per the 17th Livestock Census Reports total number of livestock and poultry in the state:

(In thousand)

State	Cattle			Buff- alos	Sheep	Goats	Pig s	Horses ponies	Mules	Don- keys	Camel	Total Live- stock	Total Poultry
	Cross bred	Indigenes	Total										
MP	317	18595	18913	10630	546	8142	358	32	4	39	8	16704	11705

The climate of the state is not conducive to adoptability of cross bred and up-graded bovine. Breeding policy of the state recommends indigenous milch breeds like Haryana, Gir, Tharparker, Sahiwal etc to be taken up at large scale, especially in rural areas along with cross breeding with Jersey as well as Holstein Friesian in urban or semi urban areas. Jamnapari and Barberi breeds of caprine and White York Shire breed of swine have been introduced in different part of the state.

As per 17th Livestock Census, there is 0.8% decline in indigenous cattle population as compared to 16th Livestock Census. There is increase of almost 10-12% in milk production. This growth in production can be attributed to significant growth of 70% in cross-bred cattle as well as 13.6% in buffalo. Per capita availability of the milk in MP is 262 gm/day higher than that of national average of 247 gm/day.

Approx. 25.84% growth of caprine and 61.2% growth in poultry during the period of 16th and 17th Livestock Census establish the potential in the sector. .

Objectives of the department:

- ❖ Animal health care and breed improvement
- ❖ Preservation and development of the superior indigenous germplasm.
- ❖ Employment generation through investment in Animal Husbandry Sector.
- ❖ Disease free, low cost and nutritious animal protein for human population through animal health care and breed improvement.
- ❖ Protection to human population from zoonotic diseases through curative as well as prophylactic measures.

Major components are-

- ❖ Animal Health care
- ❖ Breed Improvement
- ❖ Preservation and development of the superior indigenous germplasm.
- ❖ Employment generation through investment in Animal Husbandry sector.

2.0 Performance of annual plan 2008-09

2.1. The plan outlay of Rs. 8000.50 lakh for Annual Plan 2008-09 has been approved and expenditure was Rs. 4990.12 lakh.

2.2. Department has outperformed in schemes in terms of achieving the physical targets.

3.0 Performance of annual plan 2009-10

3.1. The plan outlay of Rs. 7400.42 lakh was approved. The expenditure is Rs. 1993.21 lakh by the Month end October 2009. Total anticipated expenditure is Rs. 7071.71 Lakh for the year 2009-10, the schemewise break of financial outlay and CSS contribution to the overall planned expenditure is as below:

Table 6.3.2

(Rs.in Lakh)

Plan ceiling	Anticipated Expenditure
Total expenditure	7071.71
Continue schemes	4650.47
New schemes	2421.24
Normal Plan	4846.85
Tribal sub Plan	1359.09
Scheduled Caste Sub Plan	855.57

3.2. **With the efforts of department and involvement of stakeholders, below attempts are appreciated and resulted into improvement:**

- ❖ Mass vaccination against contagious diseases.
- ❖ Modernization and strengthening of Biological Product MHOW and Disease Investigation labs.
- ❖ Intensive publicity created awareness widely at village level through awareness camps.
- ❖ State cattle buffalo breeding policy have been adopted by all agencies invited in the livestock development program.
- ❖ Improvement of milk production
- ❖ Door step delivery of breeding services.
- ❖ Curb multiplication of scrub bulls, and castration
- ❖ Strengthened information delivery mechanism through I.C.T.
- ❖ Skill improvement in livestock rearing, milking & feeding practices through I.C.T.

Production anticipated for the year 2009-10		
	Targets	Anticipated Acheivment
Milk (000 MT)	7240.00	7193.00
Egg (Million)	1200.60	703.20
Woo (lakh. Kgs)	4.04	3.76
Meat (000 MT)	25.00	24.900

- ❖ Organized livestock farmers at village level to facilitate access to linkages like credit facility, marketing etc.
- ❖ Undertaken fodder development programmes in order to meet green fodder deficit in the state.

3.3. Highlights of important physical targets and its anticipated achievement Year 2009-2010:

S.No.	Important Schemes	Total
1	Special Livestock Programme	3340
2	Distribution of breeding bulls on subsidy	979
3	Distribution of poultry units under M.P.P.P.	4272
4	Distribution of pig units/ pig trios on subsidy	1727
5	Distribution of Bucks on subsidy	6292
6	Gosewak Prashikshan	0
7	Distribution of breeding bulls on subsidy (Nandishala)	1427
8	Strengthening of Veterinary Institutions infrastructure & equipments	17
9	Strengthening of farms	1
10	Strengthening of Divisional & District Mobile van	16
11	Upgradation of Dispensaries to Hospitals	8
12	Distribution of Goat(1 0+1/20+2) units on subsidy	1142
13	Distribution of Dairy (3/5 cross breed Cows/ murreh Buffaloes) units on subsidy	1074
14	Distribution of Kadaknath chicks	1605
15	Veterinary Extension Programme	500

4.0 Annual Plan 2010-11

4.1. The planned approved outlay is Rs. 17916.65 lakh for the annual plan 2010-11. Out of the total outlay, Rs. 13263.78 Lakh is proposed under normal plan; Rs. 3297.86 lakh is proposed under TSP, and Rs. 1355.01 lakh is proposed under SCSP respectively. The break of financial outlay of few important schemes is given below:

4.2 Proposed production targets for Annual Plan year 2010-11 is given in the following table

Proposed production target 2010-11	
Item	Targets
Milk (T M T)	7674
Egg (Million.)	1344.7
Wool(Lacs Kg)	4.06
Meat (000)	28.0

4.3 Details of important schemes included in the annual plan 2010-11 are as below:

- ❖ **Special livestock breeding programme:** Under this scheme, cattle feed from 4th month to 33rd months age of the small, marginal farmers and landless agriculture labour holding cross bred/improve desi breed female calf is provided. Unit cost is about Rs. 8100. Subsidy for general beneficiaries is Rs. 3000 and Rs. 5000 for SC and ST.
- ❖ **Strengthening and modernization of biological products institutes (MHOW):** This institute of animal health and veterinary biologicals product is located at Mhow (Indore) to meet the requirement of various vaccines of the state.
- ❖ **Grant in aid to Go-Sewa-Ayog:** To ensure care of old, useless, and orphan animals with additional activity like fodder development, use of cow-urine and dung etc., financial assistance is provided to Goshalas.
- ❖ **Distribution of breeding Bulls on subsidy:** This programme is focused on such area where artificial insemination facilities are not available. Natural breeding facilities are made available by providing improved breed bulls on subsidy. Unit cost for one such breeding bull is Rs. 14000. Subsidy for general beneficiaries is 75% where as for SC and ST, subsidy is 80%.
- ❖ **Mass communication (SS):** The objective of the scheme is to spread information regarding various schemes of the department. The department organizes exhibitions, cattle fairs, seminars both at the state level as well as at various district levels.
- ❖ **Mass poultry production programme:** To promote the backyard poultry rearing on small scale in SC and ST population in order to generate additional income and raise the nutritional level of the target population. This scheme is implemented under sCSP and TSP heads only. Beneficiaries are given one unit of 15 days old 65 unsex chicks. The unit cost is Rs. 1500 which 80% state Govt. subsidy and remaining 20% amount has to be contributed by beneficiaries.
- ❖ **Distribution of pig trio on subsidy basis:** The objective of the scheme is to improve the breeds of local pigs being reared by the ST. They are given pig trio – one breedable male and two breedable female pig of improved breed on subsidy basis. Unit cost is about Rs. 7600 with 75% subsidy and remaining amount has to be contributed by the beneficiary.
- ❖ **Distribution of male pig on subsidy basis:** under the scheme, one improved breedable Boar (male pig) is given to the SC beneficiaries on subsidy basis to improve the breed of the local pig reared by them. Unit cost is about Rs. 2750 with 75% subsidy and remaining amount has to be contributed by the beneficiary.
- ❖ **Distribution of buck on subsidy basis:** under this scheme, an improved breed of breedable buck is being given to beneficiary on subsidy basis. This scheme is implemented for all categories of the beneficiaries. Unit cost is about Rs. 4000 /-.
- ❖ **Systematic control of diseases of national importance (assistance to states for control of animal disease) –** the main aim of this scheme is to control the diseases in animals like H.S., B.Q., P.P.R, swine fever, Newcastle disease and control of one identifiable disease like F.M.D. Other activities are strengthening of biological product institute, disease diagnosis labs, training programmes for Vets and Oaravets, surveillance, monitoring and forecasting information and

communication campaign in which health and awareness camps are being organized. The share of grant is 75% central and 25% is of state.

- ❖ **Estimation of cost and availability of Milk, Egg, and Wool:** this scheme is also central sponsored scheme on 50:50 basis. Scheme is meant for conducting sample survey for estimations of production milk, meat, egg, and wool for further efficient planning.
- ❖ **Remolding of departmental building:** Provision made for renovation of departmental building (MOW).
- ❖ **Establishment of Kenkatha cattle breeding farm:** to preserve Kenkatha breed in native tract at Pavai block of district Panna.
- ❖ **Intensive cattle development programme:** Improved breeding facilities through A.I. are being proposed by 17 intensive cattle development projects; 38 key village schemes; 16 state pattern A.I. centres with a network of 2340 A.I. centre/sub-centers and units. Out of these schemes, 2 ICDP's in mandsour and chhatarpur district, and 23 key village blocks are working under state plan sector.
- ❖ **Supply of Medicine and Chemicals to veterinary dispensaries and D.I.Labs:** 488 veterinary dispensaries and 3 disease investigation labourities are continued under plan head; out of them, 337 V.D. under normal plan and 151 V.D. and 3 D.I. Lab under TSP head.
- ❖ **Information Technology:** All the districts of the state are being connected under information technology. The provision of purchase of computer, allied equipments, IT training and software development is undertaken in this scheme.
- ❖ **Gosewak Training:** Gosewak yojna is a rural employment generating scheme to increase the rane of income of the trained working gosweaks. A.I. training is provided to them so that A.I. facilities will also be avaiable to the primary veterinary aids in the remote area where gosewaks aer working. For this purpose provision of stipend for traning of A.I i.e. Rs. 4000 to each selected as gosewak unde A.I. training period. After completion of A.I. training equipment working Rs. 18000 are given. Thus total expenditure of Rs. 22000 for an A.I. trained goswak (will be know as A.I.Practitioner) is undertaken.
- ❖ **Nandishala:** The main objective of this scheme is to improve the breeds of the local non descript type of cattle (Cow) by providing bulls of native descriptive breed through natural service. The scheme is running in all panchayat in the state. Under the scheme, bulls of native sescriptive breed i.e. Sahiwal, Tharparkar, Hariyana, Gir, Nimari, Malvi and Kankatha are proposed to farmers on subsidy basis. The unit cost of schem is Rs. 14000 /- (80% state and 20% beneficiary contribution). All categories of beneficiaries who have suffiecient agriculture land and minimum 5 cattle; landless who have 20 or more cattle.
- ❖ **Distribution of kadaknath chicks on subsidy:** to promote the backyard poultry rearing on small scale in ST beneficiaries which will also generate additional income and raise the nutrituional level of the target population. A unit of 15 day old 55 unsexed chicks is distributed to the ST beneficiaries in tribal district on 80 % subsidy on cost of chick, feed, medicine and transportation charges are included in the unit cost of Rs. 1500.
- ❖ **Pashudhan Beema Yojana (Cattle insurance):** The objective of scheme is to provide production maximum to farmers and cattle rearers against any eventural losses of their animals and to demonstrate benefit of scheme for the improvement in livelishock and their products.
- ❖ **Acharya Vidya Sagar Gosamvardhan yojana:** This scheme is being implemented in selected districts of MPCDF. Under this scheme, two desi

improved cows will be given in 10 to 20 female groups in three rural areas. Unit cost of scheme is Rs. 40000/-. Subsidy provided is Rs. 10000/-; loan from Mahila Kosh is Rs. 25000/-, and beneficiary share will be Rs. 5000/-.

- ❖ **R.K.V.Y:** Interventions are proposed by the animal husbandry department are as below to strengthen
- ❖ State and district training centre for improved capacity building in the area of animal husbandry
- ❖ Govt. buffalo/goat/poultry breeding farm
- ❖ To establish pashudhan vihar at Babai (Hosangabad)
- ❖ To implement gram pashudhan yojna at state level
- ❖ Feed analysis laboratory, Bhopal
- ❖ Cold chain for artificial insemination and immunization
- ❖ Establishing of ambulatory clinic
- ❖ Disease investigation laboratory for early diagnosis and treatment
- ❖ Fodder development programme

6.4 Fisheries

Inland fishery is an integral component of rural development programme in Madhya Pradesh. It is gaining increasing importance for its potential for employment and income generation. It caters primarily to the needs of socio-economically weaker and backward communities of fishermen, scheduled tribes and scheduled castes, which constitute the poorest section of the society. Fish is an important source of protein rich food.

Resources: Madhya Pradesh possesses 3.43 lakh hectare of water area in the form of large, medium and small irrigation reservoirs, village's ponds and private ponds.

The river and their tributaries form a network of 17088 Kms. The tributaries of Ganges, Yamuna like Chambal, Betwa, Ken Sone & Sindh have their origin in the state. Under NVDA some newly constructed reservoir having about 0.83813 lac ha. water area are also available for development of fishery activities.

For management of fisheries in the state. There are two main agencies who looks after the area under their control are Department of Fisheries along with FFDA's caters needs of fishermen in form of their co-operative development, extension of fisheries activity management and development of fisheries activity in small water bodies up to 1000 ha. M.P Matsya Mahasangh controls big reservoirs having more than 1000 ha. average water area.

Fish culture activity in the state is culture-cum-capture technique, which required more consideration on stocking of fish seed, technology transfer to the ground level and assistance in creation of infrastructure for fishery developmental activities.

The irrigation reservoir, up to 2000 ha., were leased out for fish culture through 3 tier panchayat system as per the Government policy. Presently, most of the reservoir with water area up to 2000 ha. are being developed by primary fishermen cooperatives societies. But due to lack of adequate financial support, the leasees are not able to obtain optimum production of these reservoirs.

Fish production from villages ponds is 1,500 Kg/ha/yr as compared to the national average of 2,180 Kg/ha/yr. Per hectare production from irrigation reservoirs is 54 Kg / ha/yr is slightly higher in comparison to the national fish production of 49 Kg/ha/yr.

To give boost to development of fisheries and for generating employment opportunities through it, the Govt. has taken certain decision. Some of which are as follows:-

- ❖ **"Fishermen"** has been defined as "a person who earns his livelihood by catching fish by actually entering into the water irrespective of his caste."
- ❖ Fishing rights of all water bodies belonging to Govt. departments, State undertaking local-bodies

Present status of M.P. in comparison of national senario.

- ❖ Available inland water area is 4.60% in comparison of National water area, MP stand 12th position.
- ❖ Ist position in Group accidental insurance scheme among Inland water states.
- ❖ Ist position in organisation of registered Fisheries Cooperative societies scheme among Inland water states.

Beneficiaries

- ❖ Total 89,400 beneficiaries in state.
- ❖ Around 1799 registered Fisheries Cooperative societies with 61398 active members in the state.
- ❖ About 28,000 beneficiaries have been benefited under F.F.D.A. scheme.

and Boards etc., be given to the Fisheries Department. The income generated through fisheries may be shared with the organization who owns the tanks.

- ❖ All ponds above 1.00 ha, water areas are leased out, preferably to fishermen cooperative societies. Fishermen cooperative societies are organized on the basis of water area.
- ❖ To attain self sufficiency in fish seed production, use of selected seasonal ponds for rearing seed on large scale is encourage through fisherwomen groups / fisherwomen societies/ private fish farmers/ Fisheries federation/ Educated unemployment fish seed farms/ hatcheries be given to Fishermen cooperative societies/SHG/Educated unemployed on lease to accelerate seed production.
- ❖ Housing facilities to fishermen working on major irrigation reservoirs be provided. Loans on easy instalments with low interest rates to be provided to fishermen for nets and boats.

2.0 Performance of Annual Plan 2008-09

- 2.1. The Budgeted outlay of Rs. 1096.00 lakh for Annual Plan 2008-09 has been approved and the expenditure reported by the department is Rs. 641.15 lakh.

3.0 Review of Annual Plan 2009-10

- 3.1. An outlay of Rs. 1405.00 lakh was approved for year. The budgeted outlay of Rs.1920.00 lakh for Annual Plan 2009-10 has been approved and the anticipated expenditure reported by the department is Rs. 1920.00 lakh. The scheme wise break up is highlighted in the below table:-

Schemes	DS/SS	CSS	Total	Normal	TSP	SCSP
Fisheries Extention	DS		28.01	0.00	19.33	8.68
Fish Seed Production	DS		221.50	168.52	15.50	37.48
Development of Reservoirs and Rivers	DS		77.69	59.93	6.89	10.87
Education and Training	DS		34.20	16.59	12.03	5.58
FFDA State Share Establishment	SS	CSS	40.00	40.00	0.00	0.00
Fishermen's Cooperative	DS		49.13	11.95	28.58	8.60
Fish Farmer's Agencies for Dev.Activities	DS		103.36	78.47	14.39	10.50
Saving Cum Relief	DS		33.05	25.05	5.57	2.43
Janshree Insurance Scheme	DS		11.26	7.18	2.65	1.43
National Welfare Fund for Fishermen(Housing)	SS		22.63	22.63	0.00	0.00
Aquarium	SS		25.00	25.00	0.00	0.00
Fish Seed Production	SS		36.12	31.76	0.74	3.62
Education and Training	SS		4.05	3.85	0.12	0.08
Research	SS		5.00	5.00	0.00	0.00
Information Technology	SS		5.00	5.00	0.00	0.00
Direction & Admn.	SS		15.00	15.00	0.00	0.00
R.K.V.Y.	SS	CSS	1200.00	756.00	264.00	180.00

3.2. Special Achievements during the year are as below:

- ❖ Department has formulated fisheries policy for sustainable development of fisheries in state.
- ❖ Conducted district wise detailed survey of all water bodies and beneficiaries.
- ❖ Stocking of large sized fingerlings in deep pools of river system in Madhya Pradesh.
- ❖ Subsidy interest on short term loan to fishermen.
- ❖ "Janshri Insurance Scheme" for fishermen welfare by the State Government.
- ❖ "Jal Deep Yojna" for fishermen welfare by Fisheries Federation for supply of nutrients to islands and isolated pockets of the reservoirs.
- ❖ Fisheries Federation awarded "ISO 9000-2001" Certificate.
- ❖ Enhance fish productivity in major reservoirs to 31 Kg./ha./yr. which is higher than national productivity ,11.50 Kg./ha./yr
- ❖ Research commissioned to CIFRI for survey of fish fauna in major rivers of the state active members in the state.

4.0 Annual Plan 2010-11

4.1. The budgeted outlay of fisheries department is Rs. 2359.00 lakh for the annual plan 2010-11. In total Rs. 1798.00 lakh (73.60%) is allocated in normal plan; Rs. 340.50 Lakh (15.87%) is proposed in TSP and Rs. 220.50 lakh (10.53%) is allocated in SCSP.

4.2 Proposed target for physical achievement for the year 2010-11 are as follows:

Proposed target 2010-11	
Main Item/activity	Targets
Fish production (Ton.)	72000
Fish seed production (lakh st.fry.)	5800
Assistance to fishermen (no)	1020
Fishermen insurance (no)	87550
Saving cum relief (no)	10885

5.0 Scheme details are as given below:

- ❖ **Direction and Administration:** This state sector scheme mainly aims to strengthen the departmental infrastructure at all levels so as to enhance the capabilities and bring it at par with the other departmental modalities.
- ❖ **Fish Seed Production:** Fish seed is the main input for the fisheries development. The envisaged growth rate is 22% per annum.

To achieve this target, new facilities for production and rearing both in public and private sector are to be created.

To accelerate the fish seed production, the provision of vocational opportunities for educated employed, private pisciculturists, fisherwomen groups and their cooperatives/through fisheries federation, Government fish farms and self help groups will be explored.

- ❖ **Development of Reservoirs and Rivers:** This district sector scheme aims to provide infrastructure facilities such as fish landing centers, storage cum-handling sheds for proper storage, transport and marketing of fish from reservoirs. The new concept of river ranching has been taken up for the very first time in the 11th five year plan period. Under this scheme fish seed stocking will be taken up to replenish the fish seed stock which has declined due to uncontrolled and over fishing in the rivers.
- ❖ **Fisheries Extension:** Under this district sector scheme, a programme of "Assistance to SC/ST fishermen "is being carried out which aims at providing subsidy upto a maximum limit of Rs. 15,000/- to a beneficiary during leased period.
- ❖ **Fishermen Cooperatives:** Financial assistance to fishermen cooperatives in the form of loan and subsidies are provided under this District sector scheme. SC/ST fishermen cooperative societies are provided subsidy up to maximum Rs.1.50 lakh in ten years period. Registered Cooperative societies are entitled to get water bodies on lease. Such societies will get subsidy on primary requirement such as purchase of fish seed, payment of leased amount nets and boats purchase. Recently Government has planned assured to give cooperative prizes to encourage fishermen cooperative societies the Ist prize of Rs.5000/- and IInd prize of Rs.3000/- each at district level.
- ❖ **Fish Farmers Development Agencies:** Fish Farmers Development Agencies are functioning in 38 districts of M.P. Under the ongoing Centrally sponsored, development of fresh water aquaculture will be done to raise the fish productivity of the rural ponds, financial and technical assistance, training to fishermen, construction of ponds in self's land, installation of aerators are given.
- ❖ **Establishment:** FFDAs are functioning in 38 districts of the State. The GoI has stopped sharing to provide establishment expenditure since April 2001. Therefore the State will be required more finance for office contingents and maintenance of vehicles.
- ❖ **Group accidental insurance for fishermen:** Members of fishermen Cooperative societies are provided insurance cover free of cost. The annual insurance premium is shared by GOI and state on 50:50 basis (The annual insurance premium is of Rs. 14/-) In case of accidental death the, nominee gets Rs. 50,000/- as insurance claim and in case of permanent disability the victim gets of Rs. 25,000/-.
- ❖ **Janshree Insurance scheme:** A new Janshree insurance scheme is approved to be implemented in XIth Five year plan (2007-12), with the assistance of State Govt, insurance company and with the share of fishermen. In case of normal death of fishermen, nominee will get Rs.30,000/-, in case of accidental death, nominee will get Rs. 75,000/- in case of permanent disability, fishermen will get amount of Rs. 75000/.
- ❖ **Development of Modal fishermen village (Centrally sponsored scheme 50:50) :** Under ongoing centrally sponsored state sector scheme it is proposed to provide basic amenities to members of fishermen cooperatives societies by construction of houses
- ❖ **Information Technology (State sector)**
This scheme deals with the upgradation of information technology to improve the efficiency of the department.
- ❖ **Saving cum-relief (Centrally sponsored 50;50)**

Under the M.P.Fisheries Riverine rules 1972, a close season w.e.f. 16th June to 15th August is observed during which fishing is prohibited. Fishermen remain out of work during this period. This centrally sponsored scheme provides financial assistance and interest to the members of fishermen cooperative societies in the closes season.

❖ **Aquarium (State Sector)**

A Govt. Fish Aquarium is established in the heart of the Capital city. It educates primarily to the people of the State about the natural fish fauna and gives glimpses of the colorful and ornamental aquatic life.

❖ **Research (State Sector)**

The Research is the backbone of the Fisheries Development.

The state level research unit is stationed at Bhopal where research work is conducted for the development of fisheries.

6.5 Forest

Madhya Pradesh is endowed with rich and diverse forest resources. Central, eastern and southern parts are rich, whereas northern and western parts are deficient in forest. Legally designated forest area of the state is 94,689 sq. km constituting 30.71% of the geographical area of the state and 12.21% of the total forest area of the country.

Forests have been classified into Reserved Forest, Protected Forest and Unclassified Forest, which constitute 65.36%, 32.84% and 1.7% of the forest area respectively. Per capita forest area is 0.16 ha as against the national average of 0.07 ha. The forests of Madhya Pradesh are rich in biodiversity and support 22% of the tiger population of the country, in addition to numerous species of mammals, birds, butterflies, amphibians, reptiles, flowering plants etc.

There are four important forest types viz. Tropical Moist, Tropical Dry, Tropical Thorn, Subtropical broadleaved Hill forests. Based on composition, the forest area has been classified into three important forest formations namely Teak forest, Sal forest and miscellaneous forest. Some of the economically important tree species are Teak (*Tectona grandis*), Sal (*Shorea robusta*), Saja (*Terminalia tomentosa*), Bija (*Pterocarpus marsupium*), Haldu (*Adina cordifolia*), Dhaora (*Anogeissus latifolia*) Tendu (*Diospyros melanoxylon*), Harra (*Terminalia chebula*), Achar (*Buchnanian lanzari*) etc. The state is one of the important bamboo bearing states. The area under bamboo forest is around 6280 sq. km. The predominant species of bamboo found in the state is *Dendrocalamus strictus*. There are many valuable plant species which yield numerous Non-Wood Forest Products (NWFPs), particularly important among them being medicinal plants.

There are 9 National Parks and 25 Wildlife Sanctuaries covering an area of 10,859 sq. km which constitutes 11.4 percent of the forest area and 3.52 percent of the geographical area. There are two Biosphere Reserves in the state namely Satpura and Amarkantak Biosphere Reserve which are repositories of biodiversity. Of the 28 Tiger Reserves in the country, 5 are in Madhya Pradesh. About 22 percent of the tiger population of the country is in Madhya Pradesh earning it the distinction of being called 'Tiger state'. Important among endangered species are Barasingha, Great Indian Bustard, Lesser Florican, Tiger, Flying squirrel.

There are a total of 52,739 villages in the state of which around 22,000 villages supporting a population of more than one crore, are located in the vicinity of forest areas. A large population of these villages, mostly tribals, who are living below poverty line, depends on forests for their livelihood. In addition to fuel wood, fodder, small timber, there are a host of items like leaves, flowers, fruits, bark, seeds, roots etc. commonly referred to as non-wood forest products (NWFP), which contribute significantly in socioeconomic development of the rural communities. There are 14,428 Joint Forest Management Committees, (JFMCs), which are engaged in protection and management of 59,400 sq. km forest area.

What do poor people get from trees and forests?

- ❖ Subsistence goods such as fuelwood, medicines, wood for building, rope, bush meat, fodder, mushrooms, honey, edible leaves, roots, fruits
- ❖ Goods for sale all of the above goods, arts and crafts, timber and other wood products
- ❖ Income from employment, both in the formal and the informal sectors
- ❖ Indirect benefits such as land for other uses, social and spiritual sites, environmental services, including watershed protection and biodiversity conservation

Status of Forest: Rising demand of forest products exerts enormous pressure resulting in degradation of forests. The total forest cover (canopy density more than 10 percent) of the state is 76,429 sq. km. Of this 4,000 sq. km is very dense (canopy density more than 70 percent) 37,843 sq. km is dense (canopy density between 40-70 percent) and 34,586 sq. km is open (canopy density 10-40 percent) forest. Around 40 percent of the forest area is categorized as degraded forest. The productivity of forests is very low. Forest areas are getting fragmented.

Issues of concern

Some of the important problems confronting forestry sector are illicit felling, unregulated removal of fuel wood, unrestricted grazing, forest fires, poaching of wild animals, mining and encroachments on forest lands. Declining productivity is also a cause of serious concern. Biodiversity needs to be conserved for posterity. Fragmentation of forest areas, honeycombing of forest areas, loss of corridors for movement of wild animals are great threats to conservation. Awareness about the importance of forests and environment is also lacking. To overcome these problems, it is necessary to strengthen the protection system by augmenting necessary infrastructure. In addition to protection, there is an urgent need to restore productivity of forest lands which can be promoted by assisted natural regeneration, planting etc. Wildlife habitat needs to be improved. Invasion of human activities in such habitats is to be curbed to avoid man-animal conflict. The forestry activities are to be taken outside forest areas by providing quality planting material, imparting training in nursery techniques and planting, encouraging and promoting planting of trees and cultivation of medicinal plants. Human Resource Development, which has not kept pace with the changing needs with time, has to be an essential ingredient in all these endeavours.

2.0 Performance of Annual Plan 2008-09

2.1. The plan outlay of Rs. 26891.26 lakh for Annual Plan 2008-09 has been approved and the expenditure reported by the department is Rs. 25481.47 lakh.

The performance of main schemes on financial utilization is given below:-

Main Schemes	Main Item/Activity	Unit	Target	Achievement
Implementation of Forest Working Plans	Rehabilitation	Hect.	145463	142994
	Regeneration group	Hect.	144946	145202
	Protection	Hect.	11481	11157
Lok Vanki and prepration of plants in nurseries	Prepration of plants in nurseries	Nos.	200 Lakh	200 Lakh
	Training & Workshops	Nos.	22	22
Forest Training Schools	Trg.	No of tranees	3500	3500
Soil & Water Coservation	Afforstation	Hect.	200	200

3.0 Review of Annual Plan 2009-10

- 3.1. The plan outlay of Rs. 24714.06 lakh was approved in the year 2009-10. But the budgeted outlay was Rs. 24713.96 lakh. The anticipated expenditure reported is Rs. 24714.06 lakh by the end of March 2010.

The anticipated performances of schemes for the year 2009-10 are as follows:

Main Schemes	Main Item/Activity	Unit	Target	Anticipated achievement by march 2010
Environmental forestry	Env. Park	No.	212	212
	Vidya van	No. of school	1361	1361
Implementation of Forest Working Plans	Rehabilitation & Regeneration group	Hect.	304400	304400
	Maintenance of last 5 years works	Hect.	1264000	1264000
Lok Vanki and preparation of plants in nurseries	Preparation of plants in nurseries	Nos.	200 Lakh	200 Lakh
	Training & Workshops	Nos.	20000000	16000000
Forest Training Schools	Newly appointed forest guard trg.	No of tranees	1300	1300
Soil & Water Coservation	Afforstation	Hect.	200	200

4.0 Annual Plan 2010-11

4.1 Bundelkhand Special Package :

Special package for bundelkhand region has also been provided. The proposed outlay for this special package for 2010-11 is Rs. 3439.48 lakh in normal sub plan.

- 4.2 The plan outlay of Rs. 35023.58 lakh is proposed for the annual plan 2010-11. Out of which, 24674.19 Lakh is allocated under normal plan; Rs. 7946.60 Lakh is under TSP; and Rs. 2402.79 Lakh is under SCSP.

4.2. Priorities:

- ❖ **Working Plan/Micro-Plan Implementation:** The major thrust in the Plan would be to effectively implement all the prescriptions various Working Plans and Micro Plans. This is not only required for the better health and hygiene of the forests but is also essential as per Supreme Court directives. The Government of India's recommendations on the dovetailing of micro-plans within the overarching ambit of Working Plans are incorporated in state government's resolution dated 7.2.2000. Accordingly, the micro plans prescribing the treatment of area as per the priorities of the people involved contains the recommendations of treating areas within the scope of the Working Plan.

- ❖ **Wildlife Management and Habitat Improvement:** Madhya Pradesh is rich in wildlife. However, with increasing biotic pressures, the wildlife habitats outside the protected areas are getting degraded and fragmented. There is a need to make special efforts for habitat improvement outside the protected area, such as creation of safe and protected water sources for wild animals. It is also important to boost up Eco-development works in villages located inside or in the vicinity of protected area. It will create wildlife friendly attitude in villagers. Similarly, the villagers who have been displaced from the protected area need to be suitably compensated.
- ❖ **Extension of Forest Cover:** Although the state has 30.71 % of geographical area under forests which is above the national average, the distribution of forests in various districts is very uneven. There is a tremendous potential for extending tree cover beyond the legal boundaries of forests under the administrative control of the forest department and also of increasing productivity of government forests through application of proper inputs and technology. For this purpose, eleven Research & Extension centers one in each agro-climatic zones have been established for conducting applied research and raising quality planting material for distribution to various stakeholders. For scientific and sustainable management of private forests in the state, Lok Vaniki programme has also been initiated.
- ❖ **Capacity Building of Staff & JFMCs:** In the changed scenario as mentioned above, the most important element to bring about effective implementation of Working Plans/Micro Plans is to enhance the capacities of both the JFMCs and the staff of the Forest Department. The training material as well as financial allocations to enable training at divisional levels is highly institutionalised today and replicated to enable the divisional level training sessions, the national level organisations are imparting training to the officers of the level of Dy.C.F. and above and updating them to become trainers for their staff. The training institutions in the state are organizing mid career refresher training to enable the staff to update itself with required managerial skills. Allocations under the schemes in HRD are provided within the Plan besides the provision of allocation from all the forest development schemes.
- ❖ **Technology Application for Effective Planning, Implementation and Monitoring:** The application of modern advanced technology like computers, networking, and satellite imageries, GPS, GIS and MIS in forestry sector has tremendous potential to assist forest managers and JFMCs for efficient implementation and strict monitoring. Accordingly, the measures of the technological application are being strengthened and special efforts have been made for better utilization of technology application.
- ❖ However, the efforts do not commensurate with the advancement in technology. The biggest hurdle is the lack of appreciation on the use of technology at the highest echelons and the requisite trained manpower and of course, financial resources. If proper attention is not paid immediately then probably the gap will become so enormous that MP forestry which is considered to be the leader, in nation will take a back seat. The activities listed above are being addressed by strengthening the staffs' skill with programs designed by the HRD and IT unit in the Forest Department. There is a strong mechanism for constant monitoring of the programs in the field and it is improving and updating the personnel
- ❖ **Infrastructure Development:** The department is ill-equipped in terms of even minimum necessary infrastructure like field staff quarters, weapons for forest protection, computers, means of communication, fire fighting equipments, vehicles

etc. Even many offices & residential building are in shambles in the absence of proper maintenance. Lack of these basic amenities is adversely affecting the quality of forest management. It is therefore, necessary to pay attention to these long felt infrastructure development requirements.

5.0 Scheme-wise details are given below:

Strengthening of Administration

a. Strengthening of Communication System

The main objective of this component is to strengthen communication system, provide strong forest protection and to train the staff in use of equipments.

b. Forest Resources Survey and Use

The objective of the scheme is maintenance and replacement of survey equipment provided to sixteen Working Plan divisions of the state and make provision for forest resources and socio-economic survey. It is proposed to establish and strengthen GIS centres in phased manner and provide for equipments like scanners, plotters computers, printers, GPS in these centres.

Environmental Forestry

The main objective of this scheme is to raise plantations in cities and urban areas to ameliorate environmental degradation and pollution and also to beautify the road, lanes and strategic locations in the cities. In addition, educational and other institutions will be encouraged to raise and maintain plantations in their premises under Vidya Van Yojna.

Implementation of Working Plan Prescriptions

The main aim of the scheme is to ensure implementation of the prescriptions of government approved forest working plans.

Forest Training Centres

Skill Enhancement Programme:

There are 9 training centre in the state which are imparting training to Foresters, Deputy Rangers and Range Officers. In addition to the regular training at the time of induction, the forest officers at various levels need to upgrade their skills with regard to Forest Protection and Judicial processes, the emerging trends and techniques.

Department has recruited 2241 forest guards. The dept. has also recruited 1500 forest guards from daily wages cade. There will be about 300 direct recruit forest guards, which will be left for traning in 2009-10.

Employees' Welfare Scheme

This scheme is taken up for the general welfare and maintenance of the assets created for the forestry staff. The repairs and creation of small facilities for forestry personnel are undertaken in this scheme. Sports activities are also taken up in this scheme to keep employees physically fit and to develop sportsman spirit in their working.

Development of National Parks and Sanctuaries

This scheme under Project Tiger and separately is aimed at Wildlife habitat improvement and strengthening the protection infrastructure of National Parks, which have been designated as Project Tiger Areas by central government. Five Project Tiger areas in M.P. get assistance under this scheme. The major works carried out under this Scheme are as follows:

Habitat management interventions, Water Resource Development and Soil-Moisture Regime Development, Development of infrastructure for communication, staff accommodation, Protection measures including fire protection, Field / Office/ Lab equipment, Purchase of vehicles for protection and eco-development. Wildlife population estimation, Compensation for death/ injury of human beings and cattle kills by wild animals, Training/ Study Tour/ Workshops/ Seminars, Research and Monitoring, Publicity/ Extension/ Conservation awareness/ Interpretation and ecotourism, Wildlife Health Monitoring and Disease Diagnosis and Research as well as preventive measures, Eco-development, Maintenance of boundary pillars, roads buildings, tanks and water holes, Fire watchers and patrolling camps and wireless equipment.

Wildlife development through Central Zoo Authority

The CZA scheme is being implemented with following objectives:

- ❖ To take management actions for conservation, propagation and rehabilitation of captive wild animals and to act as a depository of genes.
- ❖ To take measures for captive breeding and rehabilitation of highly endangered wild animals.
- ❖ To establish health monitoring and disease diagnostic and health care facility.
- ❖ To conduct research on captive wild animals and create a data base.
- ❖ To elicit public support for conservation of wildlife and wild habitats through conservation awareness programmes and ecotourism.

At present the CZA scheme is being implemented in Van Vihar National Park, Bhopal. Van Vihar National Park is managed an ex-situ conservation area with a view to achieve the above mentioned objectives. This scheme covers almost all the works that are prescribed in the scientifically prepared management plans of Van Vihar National Park.

Roads, Buildings & Forest Posts

a. Communication and Buildings

In the interest of better administration and protection of forest wealth, it is necessary that the executive staffs are provided rent free residential accommodation. In fact, available residential accommodation at present is meeting the requirement of approximately 40% of the total strength of the executive staff. Preference is being accorded to residential accommodation for field executive staff. About 113 staff quarters and one Head Quarter building at Bhopal (Van Bhawan) are proposed to be constructed and five forest rest houses are to be upgraded during 2008-09.

b. Establishment of Forest Posts

With a view to control forest offences through joint patrolling, protection posts and line quarters are constructed for the field staff. Sometime the seized produce and the offenders have to be kept under supervision of forest employees and the forest posts

have proved very useful in such situations. These are also useful as halting places for flying squads and protection groups patrolling interior forest areas. Forest protection will be greatly strengthened as a result of these posts.

Lok Vaniki and Preparation of Plants in Nurseries

a. Lok Vaniki

The scheme is for enabling farmers to undertake tree plantations on their own lands. The farmers are trained for technical capacity to raise trees. The management of such stands is to be carried out as per prescriptions of the Management Plans for thinning, tending and harvesting the crop. These Management Plans are to be formulated by Chartered Foresters.

b. Establishment and Maintenance of Nurseries

At present, 13 Centers of Research & Extension are acting as centers for raising planting material. About 200 lakh plants will be prepared in the nurseries established in the state.

Advance Fire Protection Scheme

Protection of forests from fires is vital, as fires adversely affect not only the health of the forests but also natural regeneration. These include burning of fire lines, their maintenance and watch and ward. Modern equipment like wireless sets, binoculars, vehicles etc. are also procured to protect forests from fires.

Expenditure from Onkareswar Fund:

Government of India, while sanctioning Onkareswar project, had imposed a condition that state government would create special fund from the net revenue received from the sale of timber obtained from felling of standing trees in the submergence area of the project. This fund will be utilized for the rehabilitation and reforestation of the affected forest area. Compensation for relocation of Villages from Protected Areas & acquisition of rights in Protected Areas

Villages located in areas sensitive from the point of view of wildlife in National Parks/sanctuaries will have to be relocated. The families being relocated will have to be compensated for their rights acquired by Govt. In addition, they will have to move to and establish in new areas. In such new areas, rehabilitation works like land development, provision of irrigation facilities, communication facilities etc. will have to be carried out. 9 such villages are proposed to be covered in 2009-10. This will help in smooth relocation of villages from national parks/sanctuaries and in turn, will greatly help in conservation and management of wildlife in the state.

Eco-Development Scheme for Villages inside Protected Areas

Many villages are not required to be shifted out of the National Parks/sanctuaries and will continue to remain inside these protected areas. Such villages will have to be provided with at least minimum amenities for proper living. With this in view, activities like development of alternate sources of energy, fuel and fodder plantation, training, improvement in agriculture, animal husbandry and other employment generation activities will have to be taken up in these villages. 50 such villages are proposed to be covered in 2009-10.

Studies and Research

A number of issues like plant breeding, Eco-tone development of various economically important species, development of clonal seeds etc. need to be studied. Research institutes mainly State Forest Research Institute will be given the task of taking up such studies and research projects. The amount of each such study/research will be project based.

Soil and Water Conservation

Immediate relief from soil erosion by introducing check dams, gully plugging, contour trenching and temporary structures with local material can be extended to forests areas prone to erosion by either run off or from downpours. Some amount of plantation is also carried out in these areas. This is an important activity undertaken to prevent erosion from productive areas. The scheme will be implemented on basis of site specific projects.

Grant for maintenance of Forests (12th Finance Commission)

Under the recommendations of 12th Finance Commission, a provision of annual grant of Rs. 2300.00 lakh has been made for various forestry development activities. Detailed Project Report for a period of five years (From 2005-06 to 2009-10) has been approved by the State Government.

Integrated Development of Forests & Forest Dwellers

There are about one crore people who reside in around 22,000 villages located in the vicinity of forests. Majority of the population belongs to scheduled tribes. They are largely dependent on forests for their subsistence and daily needs. To reduce increasing biotic pressure on forests, it is desirable to develop necessary infrastructure, provide alternative sources of energy and develop necessary skill in inhabitants of these villages so as to ensure their active cooperation in protection and development of forests, Therefore, a new scheme "Integrated scheme for development of forests and forest dwellers" has been proposed. Under this scheme, development of infrastructure, promotion of energy saving devices and organisation of trainings and workshops for awareness generation are proposed.

The activities proposed to be undertaken under development of infrastructure include construction of stop dams, ponds, culverts, etc. To promote energy conservation, installation of biogas plants, improved cooking stoves, distribution of pressure cookers, etc is proposed. Notification of Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Rights) Act, 2006 has necessitated launching of an intensive awareness programme to appraise the forest dwellers and foresters about their role, rights and responsibilities. It is proposed to organise training programmes, workshops, seminars etc. on extensive scale.

Fuel Plantation and Pasture Development

The total annual requirements of fuel wood and fodder have been estimated as 36 lakh MT and 160 lakh MT respectively. Although these requirements are partially fulfilled by other sources also like agriculture residues, dung cakes etc, still they have to depend on forests for more than 50 percent of requirements of fuel wood and fodder. This heavy biotic pressure on forests, much beyond their carrying capacity, has resulted into further degradation of forests in the vicinity of villages. For increasing the supply of fuel wood and fodder, it is desirable to raise fuel wood and fodder plantations in open and under stocked forest areas adjoining the villages.

Development of Model Forest Villages

Madhya Pradesh has 925 forest villages which are located deep inside the forests. These villages lack basic infrastructure facilities like drinking water, communication network, roads, irrigation and health facilities. Economic condition of the people living in these villages is not up to the mark as compared to other villages. Efforts are being made to bring these villages into the mainstream by developing infrastructure facilities and opening new avenues for employment with the help of funds of about Rs. 260 crores released by Government of India in the last two years as special central assistance.

In order to augment these efforts, it is proposed to start a new scheme under state plan budget also. Initially it is proposed to develop 10 forest villages as "**model villages**" with the token provision of Rs.10.00 lakh in the Annual Plan of 2008-09. These model villages will also work as source of inspiration for other forest villages.

Bamboo Plantations on Tribal Lands

Bamboo is known as poor man's timber. Bamboo forests are spread over an area of 6.28 lakh ha. Recent gregarious flowering of bamboo clumps in forests of Seoni and Balaghat districts, which are main production centres of bamboo, has resulted in significant reduction in bamboo production. It will take considerable time before these flowered areas are converted back into productive bamboo forests. It is, therefore, proposed to raise bamboo plantations on private lands of tribal especially on their field bunds, so that their basic and necessary requirements of bamboo are met from these plantations. Besides, the increased and easy availability of bamboo will help in promoting bamboo-based cottage industry as well.

New Schemes:

Payment of compensation for crop damage by wild animals:

Instances of wild animals raiding into agricultural fields and causing damage to the crops are not uncommon. Poor farmers, residing in the vicinity of forests, have to suffer this loss. Therefore, it becomes difficult to enlist their cooperation in wildlife conservation. In view of this, a new scheme for payment of compensation for crop damage by wild animals has been proposed. The scheme has already approved by the Standing finance committee. The scheme is proposed to be funded partially from the tribal sub plan. An allocation of Rs. 50 lakh is proposed for the year 2009-10.

Eco-tourism development:

The state of MP has high potential for eco-tourism. There are many delightful spots of scenic beauty in forest areas. These spots need to be developed in order to attract tourists. Propostion of eco-tourism will help in creating awareness about nature conservation besides earning revenue and creating livelihood opportunities to the local people. The scheme envisages identification of potential spots, preparation of site-specific detailed project reports, and development of basic infrastructure and capacity building of the local people. This scheme is partially funded from the tribal sub paln. An allocation of Rs. 100 lkh is proposed for the year 2009-10.

6.6 Food and Civil Supplies

The main objective of the Food, Civil Supplies and Consumer Protection Department is to ensure availability of essential commodities and check malpractices in supply and trade of food grains, petroleum products, sugar and other notified items. These commodities are available through Public Distribution System as well as in open market. Targeted Public Distribution System is meant for making available essential commodities to the weaker sections at administered prices. The department ensures supply even at the remotest corner of the state. Function of department is basically supervisory and regulatory in present context implementing Public Distribution Scheme and the Essential Commodities Act through control orders and schemes issued by central and state governments. The thrust nowadays is on ensuring supply of essential commodities to the targeted population i.e. people living below the poverty line.

In the field of Consumer Protection, the department is entrusted with the smooth functioning of Consumer Grievances Redressal Forums at the State and at the District level. Department encourages consumer protection movement through the registered and recognized NGOs. To carry out these functions, the Department has along with Mantralaya setup; Directorate of Food, Civil Supplies and Consumer Protection, Office of the Controller, Weights and Measures, Madhya Pradesh, Rajya Upbhokta Pratitoshan Ayog and two Corporations- Madhya Pradesh State Civil Supplies Corporation and Madhya Pradesh State Warehousing Corporation.

2.0 Performance of Annual Plan 2008-09

2.1. An outlay of Rs. 1000.00 lakh for Annual Plan 2008-09 has been approved against which expenditure reported was Rs. 900.00 lakh. out of which expenditure of Rs. 180.00 lakh was reported under normal , expenditure of Rs. 680.00 lakh was under TSP and Rs. 40.00 lakh reported under SCSP. Based on analyzing the targets and achievement of selected schemes, it was revealed that department has made satisfactory progress.

3.0 Review of Annual Plan 2009-10

An outlay of Rs. 853.00 has been budgetd for Annual Plan 2009-10. The anticipated expenditure reported by the department is Rs. 853.00 lakh i.e. 100%.

Table 6.6.1

(Rs. in Lakh)	
Major Head	Anticipated expenditure
Aid to Coop. Societies for Construction of Tanks/ Purchase of Drums to store Kerosene	205.27
Distribution of Iodised Salt	647.73
Total	853.00

4.0 Annual Plan 2010-11

- 4.1 An outlay of Rs. 7158.62 lakh has been proposed for Annual Plan 2010-11. Out of the total, Rs. 5276.05 lakh is proposed in normal plan; Rs. 608.72 lakh in proposed in TSP and Rs. 1273.85 lakh is proposed in SCSP respectively. Schemewise break up is given below: -

Table 6.6.1

(Rs. in Lakh)

Major heads	DS/SS	Total	Normal Plan	TSP	SCSP
Aid to Coop. Societies for Const. of Tanks/Purchase of Drums to store Kerosene	SS	180.00	180.00	0.00	0.00
Distribution of Iodised Salt	DS	608.72	0.00	608.72	0.00
Storage and marketing		6369.90	5096.05	0.00	1273.85
Total		7158.62	5276.05	608.72	1273.85

6.7 Cooperation

Cooperative sector is basically aimed for improving socio-economic status of the weaker section of the society and in turn arrest the tendency of their exploitation. Besides developing their economic well-being, these weaker groups of society get a sense of confidence and respect in furthering their welfare. In the present condition the cooperative societies have to face tough competition from private sector. Therefore for a cooperative it is essential to have a strong share capital base for achieving maximum borrowing capacity for attaining economic viability and profitability.

For strengthening cooperative credit structure efforts will be made for expansion and extension of credit disbursement facilities in the short term and long term sectors. In addition credit facilities in other sectors like consumers, rural development, animal husbandry, education, housing and health are proposed to be provided through rural credit societies.

In the marketing sector it is proposed to provide marketing facilities to formers for their produce. In the housing sectors apart from providing loan at very low interest rate, the process of providing housing loans to the members of the cooperative societies will be simplified. In Consumer Cooperative sectors efforts will be made to establish self serviced departmental stores through Consumer federation.

For strengthening and extension of sugar cooperatives efforts will be made to ensure that sick sugar factories in M.P. get benefited through the schemes of rehabilitation of sugar factories as proposed by Government of India and NABARD.

Integrated cooperative development projects are being implemented in the state with financial assistance from NCDC. It is a self-sufficient project for the activities of additional godowning capacity, improving agricultural production, strengthening of public distribution system, increasing irrigation facilities, dairy development, poultry farming, fisheries development, sericulture development and all developmental activities relating to Handloom and Industries.

Presently ICDPs are implemented in 10 districts of which 5 projects are already completed. Now 12 more districts i.e. Sehore, Sagar, Indore, Jhabua, Neemuch have been identified and ICD Project will be implemented in them also in near future. Efforts will be directed towards implementing ICDP in all the remaining districts of the State.

2.0 Performance of Annual Plan 2008-09

- 2.1.** An outlay of Rs. 4500.00 lakh for Annual Plan 2008-09 has been approved. Total expenditure reported by the department was Rs. 4102.94 lakh.
- 2.2.** The Physical progress of the department during the period is satisficatory. Highlights of the important schemes are as below:

S. No.	Major Head/Sub-Head/Scheme	Unit	Total Targer for the year	Achieve-ment		Major Head/Sub-Head/Scheme
1.	Information and technology work	Com.	Com.	10	-	10
2.	Implementation of ICDP	ICDP	ICDP	15	-	15
3.	Investment in share capital of PACS/LAMPS	Society	Society	3	1	3
4.	Assistance to short term loan converted to long term loan by state govt.	Bank	Bank	38	-	38
5.	Dam Duupat yojna	Members	Members	200	100	200
6.	Training of official	Officers	Officers	100	-	1
7.	Subsidy to state/ dist. Cooperative union	Union	Union	1/38	-	1/38
8.	Managerial subsidy to cadre fund of PACS/LAMPS	Society	Society	545	-	545
9.	Construction of PDS godowns/subsidy on rent	Godowns	Godowns	262	52	262
10.	Interest subsidy to farmers on short turm loan through CCB	Members	Members	735000	100000	735000

3.0 Review of Annual Plan 2009-10

An outlay of Rs. 6839.00 lakh and the budgeted outlay of Rs. 6839.00 lakh was approved for the Annual Plan 2009-10. Department is reported 100 % anticipated expenditure by the year end.

4.0 Annual Plan 2010-11

4.1 Strategies proposed for year 2010-11 are given below:

- ❖ To bring maximum number of farmers within the purview of cooperative credit sector to provide agriculture credit to the maximum number of farmers through cooperative societies.
- ❖ Maximizing the profitability and efficiency of the cooperative societies.
- ❖ Developing cooperative marketing, cooperative education and training and consumer cooperative sector.
- ❖ Participation of members in the activities of cooperative societies.
- ❖ To inspire common people for organizing Swayatt Sahakaritayane.
- ❖ Distribution of dividend in the cooperative societies.

4.2 An outlay of Rs. 11080.00 lakh has been proposed for Annual Plan 2010-11 The distribution of total outlay will be Rs. 6853.94 lakh in normal plan; Rs. 1913.75 lakh in TSP and Rs. 2312.31 lakh is allocated in SC Sub Plan.

4.3 The proposed physical targets for annual plan 2010-11 are highlighted below:

Sr. No.	Major Head/Sub Head/Scheme	Iten/Activity	Unit	Proposed Targets 2010-11
1	2	3	4	5
1	Information and technology work	Com.	Com.	10
2	Implementation of ICDP	ICDP	ICDP	15
4	Investment in share capital of primary LDB	Bank	Bank	38
5	Assistance to short term loan converted to long term loan by state govt.	Bank	Bank	38
6	Dam Duupat yojna	Members	Members	50000
7	Flootation and debenture through Apex LDB	Bank	Bank	1
8	Agriculture credit stablisation fund at the level of apex LDB	Bank	Bank	1
9	Establishment & assistance to co-operative sugar mill	Mill	Mill	1
10	Training of official	Officers	Officers	100
11	Subsidy to state/ dist. Cooperative union	Union	Union	1/38
12	Managerial subsidy to cadre fund of PACS/LAMPS	Society	Society	606
13	Construction of PDS godowns/subsidy on rent	Godowns	Godowns	336
14	Interest subsidy to farmers on short turn loan through CCB	Members	Members	77390