# STATE AGRICULTURE POLICY 2008

**Government of Orissa Agriculture Department** 

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#### INTRODUCTION

Orissa is an Agrarian State. Almost 70 per cent population of the State are dependent on agriculture. The agriculture sector contributes only about 26 per cent of the Gross State Domestic Product (GSDP), with more than 70% population dependence resulting in low per capita income in the farm sector. Consequently, there is a large disparity between the per capita income in the farm sector and the non-farm sector. Therefore, it is essential to deal with those issues which impact the income level of farmers. The National Agriculture Policy approved by the Government of India during 2000, aimed to achieve annual growth of more than 4 per cent in the agriculture sector on a sustainable basis. However, the annual growth rate achieved during the Tenth Five Year Plan averaged around 2.3 per cent. On the other hand, the non-farm sector has grown much faster. Considering the high growth of GDP in the recent past, a major reorientation in the policy is necessary to make this growth more inclusive. The decline in agriculture growth coupled with declining profitability in the agriculture sector, in the face of rapid growth of non-farm sector, is one of the major concerns. The National Policy for Farmers, 2007 has envisaged to focus more on the economic wellbeing of the farmers, rather than just on production.

The public investment in agriculture has been declining and is one of the main reasons behind the declining productivity and low capital formation in the agriculture sector. Private investment in agriculture has also been slow and must be stimulated through appropriate policies. Considering that nearly 70 per cent of India still lives in villages, agricultural growth will continue to be the engine of broad-based economic growth and development as well as of natural resources conservation, leave alone food security and poverty alleviation. Accelerated investment are needed to facilitate agricultural development.

It is quite distressing that the farmers feel at the lowest rung in the social hierarchy. It will be an important task to bring back the glory and self respect of the farming community. There are no policy tools that can achieve this directly. However, putting agriculture sector on a better path and resurrecting its

importance across the sectors will go a long way in making farming a respectable profession.

In the above backdrop, a wholesome policy framework for the benefit of the farmers of the State is now brought out with a focus more on the economic well-being of the farmers, rather than just on production and growth. More than a decade has passed since the adoption of State Agriculture Policy in 1996. There have been many significant changes in the mean time in the realm of agriculture development, more so in the post-WTO regime. Therefore, this is an appropriate time to take note of the changing situation and bring out a policy to meet the present challenges in the sector.

#### **AGRICULTURE IN ORISSA**

The State has about 64.09 lakh hectares of cultivable area out of total geographical area of 155.711 lakh hectares, accounting for 41.16 percent. Total cultivated area is about 61.50 lakh hectares. About 40.17 lakh hectares of cultivable area has acidic soil and approx. 4.00 lakh hectares suffers from salinity. About 3.00 lakh hectares of cultivable area suffers from water logging.

Agriculture contributes about 26% in the State Gross Domestic Product (SGDP). About 65% of the workforce depends on agriculture for their employment.

The average size of holding in the State is 1.25 ha. The small and marginal farmers constitute about 83% of the farming community.

The State is divided into 10 Agro-climatic zones on the basis of soil structure, humidity, elevation, topography, vegetation, rainfall and other agro-climatic factors.

The average rainfall in the State is 1452 mm, of which about 80% is confined to monsoon months (June-September). The total irrigation potential created is 27.63 lakh hectares in Kharif and 13.31 lakh hectares in Rabi.

The total food grain production in the State during 2007-08 is estimated to be 92.13 lakh tones which is approx. 4.06 percent of national food grain production. Rice is the main crop of the State.

Agriculture in Orissa is characterized by low productivity on account of various factors. These factors include problematic soil (acidic, saline & waterlogged), lack of assured irrigation, low seed replacement rate, low level of fertilizer consumption (53 kg/ha. against national average of 113 kg/ha.), low level of mechanization etc. The serious gaps in yield potential and the technology transfer provide an opportunity to the State to increase production and productivity substantially.

#### **OBJECTIVES**

Agriculture in Orissa continues to be characterized by low productivity due to traditional agricultural practices, inadequate capital formation and low investment, inadequate irrigation facilities, low water use efficiency, uneconomic size of holding, etc. The agricultural development plan in today's context has to be holistic, well-defined and focused towards overall well-being of the farming community. The Government, therefore, have decided to go for a New Agriculture Policy which is futuristic, flexible enough to anticipate and address emerging trends, identify potential areas for development and chalk out a clear agenda for agricultural development for at least next 10 years. The main objectives of this Policy are as follows:

- ➤ To bring in a shift from the present level of subsistence agriculture to a profitable commercial agriculture so that people would accept agriculture as a vocation;
- To promote sustainable agricultural development;
- To enhance productivity of important crops at least to match with national average (enhancing seed replacement, availability of quality planting materials, INM, IPM, water management, farm mechanization and technology transfer);

- ➤ To encourage crop diversification particularly in uplands and medium lands (e.g. paddy to non-paddy crops);
- > To focus on horticultural crops including dry-land horticulture;
- To encourage modern farming system approach;
- To enhance water use efficiency through peoples' participation;
- To facilitate increased long term investment in agricultural sectors (on farm as well as off farm) both by private sector, public sector and private & public partnership (PPP), particularly for post harvest management, marketing, agro processing and value addition, etc;
- To encourage contract as well as compact farming;
- > To increase access to credit for small and marginal farmers;
- ➤ To facilitate appropriate market linkages for agricultural produce with respect to which the state has competitive advantages;
- ➤ To implement integrated watershed development programmes in watershed areas for Natural Resource Management (NRM), increased crop production as well as on-farm and non-farm income;
- To create appropriate institutions / facilities to undertake regulatory, enforcement and quality assurance activities matching to the emergent needs.
- ➤ To redefine the roles and responsibilities of the agricultural extension machinery by suitably restructuring the field extension set up.

#### **INPUT MANAGEMENT**

#### (i) Seeds:

Seed is one of the most important inputs that plays a key role in boosting agricultural productivity. Keeping the other inputs of production constant, the quality seeds alone can increase the production to the extent of above 20%.

According to many agricultural scientists, one of the main reasons for the low productivity of many food crops in Orissa is the poor Seed Replacement Rate (SRR). The SRR refers to the percentage of area of crop in which improved / certified seeds are used in a given crop season. The present Seed Replacement Rate in Orissa is about 10% in paddy, the most important crop in the State. The Seed Replacement Rate in paddy will be enhanced to 25% by the end of Eleventh Five Year Plan. To achieve SRR of 25%, 6.00 lakh quintals of certified seeds will be produced in the State by the end of the Eleventh Five Year Plan. In order to achieve the above, Seed Village Scheme will be intensified. The Seed Village Scheme is a viable model of participative production of quality seeds with the involvement of farmers. This makes it possible for production of seed at reasonable costs and ensures timely availability of quality seeds to farmers. Seed Village Programme will be implemented in all the blocks of the State. Special emphasis will be given for production of vegetable seeds, oil seeds and pulses seeds. Suitable production incentive and distribution subsidy will be provided for production and distribution of quality seeds.

In order to achieve required SRR, Seed Processing Plants along with godowns of adequate capacity will be established in each district. Five existing Processing Plants will be provided with dehumidified chamber for storage of seeds of groundnut, vegetable, etc. Adequate number of Mobile Seed Processing Plants will be procured to provide processing facility to seed villages. Orissa State Seed Corporation will be strengthened / restructured.

Presently, there are three Seed Testing Laboratories in the State. More number of Seed Testing Laboratories will be set up. Orissa State Seed Certification Agency (OSSCA) will be strengthened. Presently, OSSCA has 8 offices of Seed Certification Officers. Five more Offices of Seed Certification Officers will be established so that there is one Office of Seed Certification Officer in each undivided district of the State. The new Seed Certification Offices will also have Seed Testing Laboratories.

In order to facilitate easy availability of seeds to the farmers, seed sale centres will be opened in each Gram Panchayat through a network of private seed dealers.

- There are more than 200 indigenous varieties/races of paddy in the State. An attempt will be made to maintain germplasm of these indigenous varieties and to establish geographical indicators for improvement of these varieties supported by a branding exercise, especially for certain special indigenous aromatic rice varieties.
- A special campaign for seed treatment will be launched with the participation of multiple agencies. Mobile seed treating machines will be popularized. It will be ensured that Orissa State Seeds Corporation Ltd will supply only treated seeds.
- System of Rice Intensification (SRI) method of paddy cultivation requiring less seed rate will be promoted in the state in partnership with NGOs and CBOs.
- ➤ The linkage between the Research Institutions producing the breeder seeds with the Department will be strengthened for introduction of better varieties.
- Scientifically bred, drought and pest resistant high yielding and environmentally safe varieties will be promoted.
- Hybrid rice in the state will be promoted at appropriate agro-ecological situations with quality safeguards.
- Only after assessing the risks and benefits associated with Genetically Modified (GM) crops as per existing rules and procedures, such crop varieties would be introduced.

#### (ii) Irrigation:

Irrigation plays a significant role in increasing the yield from the land. Non-availability of timely are adequate water for irrigation is now becoming a serious constraint in achieving higher productivity and stability of farming. Therefore, assured irrigation is the need of the hour. Though, the total rainfall in our State is satisfactory, its distribution over time and space is highly uneven. So, rain water harvesting and improving the efficiency of water use are important. It has been assessed that even 10% increase in the present level of water use efficiency in irrigation project may help to provide life saving irrigation to crops in

large areas. The concept of maximizing yield and income per unit of water would be used in all crop production programmes. Water Users' Associations are being encouraged to maximize the benefit from the available water.

- There are a number of irrigation projects at various stages of completion in the State. Adequate resources would be provided for speedy completion of the ongoing projects.
- ➤ Participatory community irrigation management (PIM) will be encouraged through the *pani panchayat* system. *Pani panchayats* (Water Users' Associations) will be strengthened. Steps will be taken for capacity building of *pani panchayat* which will bring about awareness of their rights, roles and responsibilities in effective utilization and monitoring of water allotted to them.
- Rotational Water Supply System will be adopted for effective use of water.
- The spread of the benefit of major and medium irrigation projects being confined only to a few districts of the State, it is necessary to take greater interest for developing rain water harvesting structure, ground water recharge, traditional water bodies, farm ponds, etc.
- Assured irrigation will be made to at least 35% of cultivable land in each block. This will be achieved by a suitable combination of flow irrigation and lift irrigation.
- Irrigation tanks will be dug in every village having such potential.
- Individual tube wells and bore wells will be promoted under the *Jalanidhi* programme with subsidy upto 50% of the project cost.
- Community Lift Irrigation projects with subsidy upto 80% of the project cost in the non-tribal and non-KBK districts and upto 90% of the project cost in the tribal and KBK districts will be continued under Biju Krushak Vikas Yojana (BKVY).
- Micro irrigation (drip and sprinkler irrigation) helps farmers in saving water, increasing yields, supporting new technological packages and increasing the employment. Micro irrigation will be promoted in a big way in the State by providing subsidies for drip and sprinkler irrigation upto 70% of the

- cost. Micro irrigation revolution will go a long way in creating efficient water use in the State.
- Drawal of electric line for energisation of dug well / private L.I. points will be subsidized under Biju Gram Jyoti Yojana (BGJY).
- Supply of irrigation water through underground conduits in place of over ground canals will be encouraged to minimize transmission loss.
- Farm ponds will be executed free of cost in the field of BPL farmers in the state under NREGS.
- ➤ About 3 lakh hectares of agriculture land in Orissa remains waterlogged due to poor drainage. Integrated development of these areas will be attempted through appropriate engineering and land / crop management interventions.

#### (iii) Fertilizers:

To increase agricultural production, it is necessary that chemical fertilizers as well as organic manure are used adequately and in a balanced manner. Presently, fertilizer consumption in the State is 53 kg/ha only as compared to the national average of more than 100 kg/ha. Hence, there is adequate scope for increasing fertilizer consumption in the State. While suitable measures will be taken to increase fertilizer consumption in the State, emphasis would be laid on 'balanced fertilization'. Balanced fertilization is defined as an accurate fertilizer application equal to the plant need and soil nutrient content. To achieve balanced nutrition for sustainable crop production, Integrated Nutrient Management (INM) is very important. The goal of INM is to integrate the use of all natural and man-made sources of plant nutrients required for high agricultural productivity besides ensuring the health of the soil. State will endeavour to promote INM practices in a big way through suitable programmes and incentives.

The effect of prolonged and over usage of chemicals on soil results in soil health deterioration, human health hazards and pollution of the environment. Hence, it is necessary to switch to an alternate source of nutrient supply to the

crops which is ecologically protective of farming. The State will promote use of bio-fertilizers in a big way through suitable incentives and effective extension.

#### (v) Farm Mechanization

Farm Mechanization brings a significant improvement in agricultural productivity in a number of ways. The timeliness of various agricultural operations is crucial in obtaining optimal yield, which is possible only through mechanization. Secondly, the quality and precision of the operations are equally significant for realizing higher yield. The various operations such as land leveling, irrigation, sowing and planting, use of fertilizer, plant protection, harvesting and threshing need a high degree of precision to increase the efficiency of the inputs and reduces the losses. Farm Mechanization also goes a long way in reducing the drudgery of agricultural operations. With mechanization, there are good chances to reduce the cost of production.

In our State, level of mechanization is low. Farm Mechanization will be promoted in a big way by ensuring easy availability of appropriate farm machineries at substantially subsidized rates. Rate of subsidy on farm mechanization and equipments will be raised to 50% (Annexure-I).

- ➤ The farm machinery suitable for different types of soil and operation for important crops shall be developed.
- ➤ Technical know-how shall be provided to the farmers with respect of appropriateness of the farm machineries for the situation.
- Training relating to farm machineries and equipment shall be imparted to the farmers and artisans.
- Women friendly farm equipments will be promoted.
- Integrated Pest Management (IPM) and use of bio-control agents will be encouraged in order to minimize the indiscriminate and injudicious use of chemical pesticides. Subsidy will be provided for plant protection equipments.
- Agro Service Centers will be promoted to provide door-step services for farm mechanization.

# SOIL TESTING AND RESTORATION OF SOIL HEALTH AND FERTILITY

Soil heath enhancement holds the key to raising farm productivity. Restoration of soil health and fertility is one of the prime needs of Orissa's Agriculture. Steps will be taken to ensure that each farmer is issued with a Soil Health Card in a campaign mode. These Soil Health Cards will have the details of results of soil tests and remedial measures required for restoring soil fertility. The following measures will be taken for restoration of soil health and fertility.

- ➤ The farmers will be encouraged to get soil samples of their holding tested once in three years.
- More Soil Testing Laboratories will be set up in the State and existing Soil Testing Laboratories will be strengthened.
- Soil testing facilities will be made available at all Block headquarters through provision of soil testing kit to Block level functionaries of Agriculture Department.
- The State will encourage setting up of Soil Testing Laboratory through private entrepreneurs to provide soil testing facilities to farmers. Private sector soil testing laboratories will be given financial incentives like capital investment subsidy etc. to make their operation viable.
- Soil amendments such as lime, basic slag, gypsum, paper mill sludge etc. will be made available to farmers at affordable prices.
- Cultivation of green manure crops like Dhanicha will be promoted extensively by making available seeds and technical know-how to the farmers.
- ➤ The farmers will be trained in the production of biofertilizers like bluegreen algae, azolla, rhizobium etc.
- At least one Vermi Hatchery will be set up in each block with private participation. Vermi Compost unit at village level will be promoted. Suitable incentive / subsidy will be provided for setting up of Vermi Hatcheries and Vermi Compost unit.

- Plantation of bio-fuel crops will be taken up in public lands taking the foodsecurity aspects into consideration.
- Tribal farmers will be discouraged from shifting cultivation with alternate livelihood options.
- ➤ A compensation mechanism will be worked out for the crop loss due to dumping of industrial wastes/ by-products in violation of pollution norms by industries.
- Extensive campaign would be organized with the involvement of NGOs and PRIs for motivating farmers to restore fertility by addition of green manure and through other corrective measures.

#### AGRICULTURAL RESEARCH AND EDUCATION

The State has one Agriculture University namely, Orissa University of Agriculture and Technology with the network of colleges and research stations to cater to the needs of the farmers of the State. The emphasis would be given to 'demand-driven' research rather than 'project oriented' research. Understanding the farmers need has to be institutionalized in the University set up so that their research caters directly to clientele. At the same time, the goals of the basic research should not be lost. Primarily focus of research in Agriculture University should be on applied research as this was one of the objectives for which this University was established. OUAT and other ICAR research institutes like CRRI, etc. should gear up seed research to develop better seed production, processing, testing, packing, storing and cost reducing technologies. Emphasis should be given to development of technologies to cater to the needs of a large number of clientele and specifically small and marginal farmers. Agricultural University should enhance its media exposure and enter the technology business, effectively competing with private traders.

- ➤ The demand for Agricultural Education is changing very fast and public institutions may not be able to meet the demand. In the general education sphere, private institutions have played a pivotal role and therefore, the State will consider allowing private institutions to venture in the Agricultural Education Sector.
- ➤ It is observed that technology developed by the scientists in the Universities take a minimum of three years and in some cases five years to reach the farmer. It is necessary that such delays are avoided. There is a need for an efficient extension system to carry the message to the farmers so that diffusion of technology is faster.
- The new technologies need to be tested under localized situations and suitably modified wherever necessary for adoption by the farmers. Linkage already developed between agricultural research and extension will be strengthened.
- ➤ A Bio-technology Centre under the OUAT will be set up to take advantage of modern technologies, for the production of improved/hybrid planting materials of various crops suitable in different agro-climatic zones of the State
- ➤ The data base for the Agriculture Sector will be strengthened to ensure credibility and reliability of estimates and forecasting which will help in the planning and policy making.
- Vocational Training Institutes will be promoted to create self-employment opportunities and to attract the youth in the agriculture sector.

#### **AGRICULTURE EXTENSION**

The gap between scientific know-how and field level do-how has been widening in the recent years. This knowledge deficit needs to be overcome speedily to enhance farm productivity and profitability. It is well recognized that farmers are changing over the years, both as individuals, as well as their contact with the outside world and their information seeking habits. Today they require

extension services unlike two decades ago. As the agricultural sector will be gradually segregating into two different segments- commercial and subsistence-the extension system will have to adopt a bimodal approach in its working. Extension machinery needs to be strengthened through retraining and retooling of existing extension personnel. The extension system has to undergo a change in its outlook. 'Talking Type', of extension will be replaced by 'Doing Type'. Reaching the contact farmers and delivering the messages by 'Doing Type' of extension will be emphasized.

Agriculture Technology Management Agencies (ATMAs) are operating in all the thirty districts of the State. They are the knowledge centres for the farmers that provide information on inputs, farm practices and market intelligence. However, the functioning of ATMAs need to be improved substantially. ATMAs will be properly equipped, both in terms of training and manpower.

Agriculture graduates will be motivated to undertake Agricultural Consultancy Services. Such Agricultural Consultants will act as catalysts in bringing the desired changes in cropping system, introduction of new technologies, providing market information and other required support to enhance the income of farmers. These consultants will be trained in the Agriculture University and provided a package of technology that is locally acceptable.

- Presently, the extension work is being done by the institutions in the public domain. In the changed scenario, besides the public sector agencies, agri-clinics, farmers' organizations, farmers' field schools, cooperatives, Panchayati Raj Institutions, NGOs and para-technicians will be encouraged for extension activities.
- Emphasis will be laid on promoting farmers to farmers learning by setting up Farm Schools in the field of progressive farmers.
- One lead farmer for each Gram Panchayat will act as 'Krushak Sathi'. The Krushak Sathi will be appropriately trained so that they serve as effective contact points for dissemination of Agriculture Technology to other farmers in the Gram Panchayat.

- ➤ Linkages between the Department and Research Institutions like OUAT, CRRI and CIFA etc. will be strengthened so as to facilitate a smooth transfer of technology to the farmers. The KVKs in the districts would be the Link Points on researchable issues in the farm sector.
- ➤ The technological dissemination and adoptions will be as per the bottom up planning by the farmer advisors and Block Technology Team (BTT) of experts reflected in the Block Action Plans (BAPs).
- Gram Krushak Manch (GKM) in every revenue village will be used as a tool to increase outreach to more number of farmers.
- Strategic Research Extension Plan (SREP) approach for identification of the farmers' problems and farmers-scientist interactions (FSI) for development of appropriate technology solutions will be encouraged.
- Opening of 'Information Kiosks' by interest agri-entrepreneurs will be encouraged.
- Farm Information and Advisory Centre will be opened in all Blocks.
- ➤ The existing State Level Training Institute (IMAGE) and other Regional Level Training Institute (RITE) will be revamped with latest capacity building tools and technologies, infrastructure and skill human resources.
- Selected best farmers would be given cash award at Block, District and State level every year.
- The officers of the Department at each level will be professionally trained to upgrade their skills and technical knowledge in partnership with Institutes of repute.

#### **HORTICULTURE**

Orissa is bestowed with variety of agro-climatic conditions favourable for the development of horticultural crops. Horticulture provides excellent opportunity to raise the income of farmers even in dry tracks. Since income derived from horticulture per hectare of land is generally higher than in cereals and pulses, the State will exploit the field potential for expanding the area under horticulture. The area under horticulture can be doubled with appropriate promotional policies and cropping patterns. Importance of dry land horticulture as a supplementary source of income to the farms will be promoted.

- Most of the horticulture crops being perishable, facilitates for storage, processing and marketing need to be organized carefully for ensuring remunerative returns for the farmers. This will require that such crops are grown on a sufficient scale instead of scattered cultivation by individual farmers. A cluster approach will therefore be adopted. This will make it possible to have adequate processing and marketing arrangements made on a viable scale.
- Horticulture crops are also ideally suited for contract farming. The Government will actively encourage private entrepreneurs and food processing companies to enter into marketing contracts with farmers growing horticulture crops.
- Absence of cold storage facility with sufficient capacity has constrained the development of Horticulture sector in the State. The State Government will promote cold storage facilities by providing subsidy and other incentives.
- ➤ Electricity tariff for Cold storages will be at special rates (Agro industrial consumers) instead of Industrial / Commercial rates.
- ➤ The production of quality planting materials and seeds on a sufficient scale is a major pre-condition to the promotion of horticulture crops in the State. In order to increase production of quality planting material at least one Model (big) Nursery will be set up in each district and one Small

Nursery will be set up in each block. The horticulture farms of the State Government can be made available to private entrepreneurs on payment of suitable rent for setting up mega production centres which can produce planting materials in large number by using modern method of technology and bio-technology. Such mega production centres can also be set up in PPP mode. These centres can also take up training of farmers in the cultivation and post harvest management of horticulture crops.

- At present, National Horticulture Mission (NHM) covers 24 districts of the State. The State will launch State Horticulture Mission (SHM) for the remaining 6 districts. All the benefits available under NHM will be extended to the farmers of the 6 districts under State Horticulture Mission.
- ➤ The State will promote venture by private farms for setting up cold storages and processing facilities on a large scale in every district by providing subsidy up to 40% of the capital investment excluding the cost of land.
- ➤ In urban areas, home gardens and nurseries would be encouraged; Avenue plantations and greening the landscapes would be part of the developmental agenda of the urban local bodies.

#### Floriculture:

Orissa's soil and climatic conditions are suitable for successful cultivation of flowers like rose, tuberose, marigold and gladiolus. Demand for flowers is also growing rapidly in the State. Though floriculture in the State is in infant stage, an increasing trend in cultivation of flowers is marked. Though there is a huge potential of floriculture in the state, farmers are reluctant to take up floriculture, mainly due to marketing problems. Information about prices and floriculture technology is also not readily available to small producers.

Growers Co-operative will be encouraged and wholesale markets exclusively for flowers will be developed. Contract farming of flowers will be encouraged with suitable forward linkage. Suitable financial incentive will be provided not only for cultivation of flowers but also for post harvest management including marketing.

#### Cashew nut:

One of the most important commercial crops grown in the State is cashew-nut. Orissa is the third largest producer of cashew-nut after Maharashtra and Andhra Pradesh. Presently, the area under cashew-nut is 1,26,000 ha, with production of approx. 78,000 M.T. Though the average productivity in the State is higher than the national average, there is ample scope to further increase the productivity. Plantations over approx. 40% of the area are old, senile and uneconomic and variety is also traditional. A special programme will be launched for replacement of the old, senile and uneconomical plantations with clones of High Yield variety in a time bound manner. Cashew processing in the State will be given priority.

#### Coconut:

Orissa is 5<sup>th</sup> largest producer of coconut after four southern States. However, the productivity in the State is much below the national average. Main reason of low productivity is existence of large number of old and senile plants in the State. A definite, time –bound programme will be taken up for replacement of old & senile plants with new high yield variety plants.

#### WATERSHED DEVELOPMENT

Watershed Development is one of the priority areas for the State. Orissa has been one of the pioneers in demonstrating successful watershed development programme. The focus of this development programme is to conserve soil and moisture as well as to put lands to the best use according to their capabilities to improve the overall productivity of the catchment in a holistic manner. The process of watershed development involves co-ordinated multi-disciplinary activities of and expertise from several Departments. In order to

achieve better co-ordination in planning, implementation and supervision in watershed programme, Government of Orissa has set up a separate mission named Orissa Watershed Development Mission.

Under the DFID – assisted Western Orissa Rural Livelihood Project (WORLP), "Watershed-plus" approach has been successfully adopted wherein, in addition to area development, livelihood component has also been implemented. Livelihood component of the 'Watershed-plus' approach will be extended to all watershed projects in the State under the scheme "Jeebika". Community based organizations such as Self-Help Groups (SHG), User Groups (UG) and Common Interest Groups (CIG) evolved under Watershed Development Programme will be suitably strengthened. Watershed Associations will be entrusted with suitable responsibilities such as distribution of seeds and other inputs in the project area.

Farm ponds will be dug in the farms of individual farmers through the Watershed Associations. The small and marginal farmers will avail the facility free of cost while the other farmers will have to contribute 50% of the cost of such pond to the Watershed Association.

#### RAINFED AGRICULTURE

Orissa has vast areas under rainfed agriculture and therefore rainfed farming technology will be the fulcrum of the future development in the agricultural sector. These regions are also the backward regions where poverty is more pronounced. It is, therefore, imperative to initiate a programme of inclusive development for rainfed agriculture in the State. Location specific recommendations for soil and moisture conservation and crop practice for dry lands are available, but these are not fully adopted by the farmers due to various constraints.

There is need for more vigorous efforts for development of dry lands on a watershed basis with wider adoption of the recommended practices to enhance crop yields.

Crops and varieties which are suitable for these regions will be identified and specific research efforts will be made to direct research towards short duration and drought tolerant varieties. More thrust would be given for rain water harvesting and watershed development.

Paddy is grown in about 8 lakh hectares of highland in the State which is un-remunerative as well as subject to the vagaries of nature. Farmers would be persuaded to raise light duty crops like oilseeds, pulses and horticultural plantations crops on such lands. Suitable incentives shall be provided for crop diversification.

#### **ORGANIC FARMING**

The chemical approach to productivity augmentation followed since midsixties has depleted the natural resource base for sustainable agricultural growth. The earlier technology has disturbed the biological composition, which might have lasting adverse impact on equilibrium. Unless the disturbed natural resource base equilibrium is restored, sustainable agricultural growth with competitive edge will not be possible. Restoration of soil health and fertility through appropriate organic package would be crucial. Specifically, the following policy steps will be implemented:

- > Suitable incentive for Organic Farming will be provided to farmers harvesting organically certified crops.
- ➤ A drive will be launched for augmenting production and use of nonchemical fertilizer suited to different farming situations. This would need appropriate thrust on research and extension programmes.
- Organic Farming will be included in the syllabus as a subject at school level. It will also be introduced as a compulsory subject at degree level as well as Post Graduate level in the State Agricultural University.
- Organic Farming Systems will be identified for each agro-climatic region, scientifically analyzed and recommended through a special publication entitled Organic Package of Practices.

- Organic Seed Banks will be opened.
- Organic Farmers Association will be promoted in order to facilitate certification of the products.
- ➤ A separate agency would be set up for certification of organic products.

#### INTEGRATED FARMING

Traditionally, Indian farmers adopted Integrated Farming System approach for their livelihood. With industrialization, farmers were forced to become commodity farmers. Though, agro-climatic conditions are primarily responsible for the existence of particular crops and cropping pattern, industrialization, commercialization and mechanization have also played a major role in farmers' decision making for growing particular crop or adopting a particular farming system. Dairy farmers, poultry farmers, vegetable growers, fruit growers, bee keepers, mushroom farmers etc. became independent entrepreneurs, particularly around cities to explore the market potential to some extent. Farmers fortune thereafter start fluctuating with the market trends for a single commodity and their dependence for external inputs also increased.

In the commodity oriented market scenario, the focus is usually on a singular production system. Integrated approach, however, has several distinct advantages such as security against complete failure of a system, minimization of dependence for external inputs, optimum utilization of farm resource, efficient use of natural resources etc.

In order to minimize the risk of the farmers, integrated farming or farming system approach will be encouraged in the State. A proper combination of different farm production systems namely, agriculture, horticulture, livestock, poultry, agro-forestry, sericulture and pisciculture will be promoted.

#### POST HARVEST MANAGEMENT

The objective of agricultural development includes not only enhancing the productivity of agriculture but also maximizing the value of the produce generated. Value addition to agricultural produce involves proper post harvest processing, grading, packing, transportation and storage. The poor handling of farm produce results in a loss of upto 30% of the produce. This also considerably reduces the value realized by the farmers. Provision of post harvesting, processing and storage facilities therefore, assume great importance in increasing the income levels of the farmers of the State.

- Absence of proper threshing facilities in the villages forces many farmers to use inefficient and unscientific methods of threshing. Steps would be taken to create 'Community Threshing Yards' to enable farmers to thresh their crops in time by using appropriate equipment.
- Non availability of scientifically desired threshing equipment forces farmers to use unscientific method of threshing with considerable crop damage. Facilities would be created in private sector for custom hiring of threshing equipment by providing upto 50% of the cost of equipment as subsidy. Self Help Group of farmers will be provided subsidy upto 75% for acquiring threshing equipment for various crops.
- ➤ Grading, packing and transportation of fruits, vegetables and flowers greatly add to the value of these commodities. At present, many farmers transport vegetables and fruits in bulk without any packing resulting in substantial deterioration of these commodities at the storage and sale points. To promote proper handling of vegetables and fruits individual farmers and farmers groups would be given intensive training. Farmers would be provided with subsidy to purchase crates and other equipments.
- ➤ Major storage facilities will be created at important market centres by Orissa State Agriculture Marketing Board to facilitate scientific storage of produce till it can be sold at remunerative prices.

#### **AGRI-ENTERPRISES**

APICOL (Agricultural Promotion & Investment Corporation of Orissa Ltd) has been formed with the intention of bringing enterprise into agriculture. The Corporation provides necessary information regarding the scope of commercial and export oriented agriculture in the State of Orissa. It formulates schemes for bankable projects, identifies entrepreneurs and guides and trains them. It provides escort services to houses engaged in agri-business. It also acts as a nodal agency for providing incentives to agro and food processing industries. APICOL will be suitably strengthened and restructured to make its functioning more effective.

In order to identify agro entrepreneurs, counsel them and train them, Krishi Sahayak Kendras (KSKs) are functioning in each district. District Agriculture Officers are functioning as Krishak Sahayaks. KSKs provide technical guidance to entrepreneurs in commercial agriculture, horticulture, floriculture, milk production, meat and egg production, fish production etc. In view of the increasing scope for agri-enterprise, KSKs will be appropriately professionalized.

Capital Investment Subsidy for setting up of agri-enterprises will be enhanced to 25% of the fixed capital cost (excluding the cost of the land) subject to the limit of Rs.25.00 lakh. Additional incentives will be given to SC/ST/Women agri-preneurs along with graduates of Agriculture & allied disciplines. The list of agri-enterprises eligible for Capital Investment Subsidy is enclosed (Annexure-II).

#### **AGRO-PROCESSING**

Setting up of agro-processing units in the producing areas to reduce wastage, especially of horticulture produce, increase value addition and creation of off-farm employment in rural areas will be encouraged. Collaboration between the producer co-operatives and the corporate sector will be encouraged to promote agro-processing industry. An inter-active coupling between technology,

economy, environment and society will be promoted for speedy development of food and agro processing industries and build a substantial base for production of value added agro-products for domestic and export markets with a strong emphasis on food safety and quality.

#### **AGRICULTURAL CREDIT**

#### (i) Expansion of the Cooperative Credit Network

The network of the Primary Cooperative Credit Societies in the tribal areas whose growth has remained restricted due to the LAMPS approach will be expanded, making agricultural credit more accessible for the tribal population and bringing the grass roots level Cooperative Credit Societies nearer to the farmers in the tribal areas taking into account the number of GPs in the existing LAMPS; population of different GPs; the number of agricultural households in the different Blocks / LAMPS and the situation of connectivity.

The Kisan Credit Card (KCC) Scheme aims at providing adequate and timely credit support from the banking system to farmers for their agricultural operations in a flexible, hassle-free and cost-effective manner. The farmers use these Cards for the purchase of agricultural inputs such as seeds, fertilizers, pesticides etc. and also to draw cash for their production needs. 7 lakh agricultural families in the State having no access to institutional credit will be brought under the fold of co-operative credit by providing Kisan Credit Cards to eligible farmers in two years covering 3.5 lakh families per year. The Cooperative Societies are being revived in order to make credit available to the farmers at the village level.

#### (ii) Agricultural Credit at Concessional Interest Rates

Government of Orissa have provided agricultural credit to the farmers at a cheap rate of 7% interest through the Cooperative Banks. The State Government is providing interest subvention support to the Cooperative Banks to enable them to finance crop loans to the farmers of the State at 7% interest rate.

#### **RISK MANAGEMENT**

The State Government have been implementing the National Agricultural Insurance Scheme (NAIS) with effect from Rabi 1999-2000 crop season with the scope of compulsory coverage of loanee farmers and optional coverage of non-loanee farmers. Taking into account the availability of data on production in respect of different crops and provisions / guidelines of the Scheme, major crops like paddy, groundnut, maize, niger, redgram (arhar) and cotton during the Kharif and the crops like paddy, groundnut, mustard and potato during the Rabi crop season are covered under the NAIS. The farmers under the Scheme are indemnified against their yield loss in the even of natural calamities like drought, flood and cyclone etc. thereby stabilizing farm income and providing a cushion to the farmers in the shape of indemnity claims against any unforeseen disasters.

- Disaster preparedness programmes and contingent planning will be made for the disaster prone areas with emphasis on the vulnerability index of the farming community.
- ➤ In partnership with IMD, location specific weather forecast and Agrometeorological Advisory Service (AAS) will be provided to the farmers as per different climatic conditions and cropping patterns.
- The emerging issue of impact of climate change on agriculture would be addressed by taking proactive measures and developing effective strategies for each agro-climatic zone to reduce the vulnerability to climate change.

#### AGRICULTURAL MARKETING

The OAPM Act was amended in June 2006 to allow 'Establishment of Private Markets' and 'Contract Farming' by any person or Company or a Cooperative Society. The OAPM Rules, 1958 in conformity with OAPM (Amendment) Act, 2006 have also been amended. The reforms in the legal framework for agricultural marketing will enable private sector investment in agribusiness and permit contract farming activities which will be immensely beneficial for the farmers of the State. Contract farming in Cotton has already started in the districts of Rayagada, Kalahandi, Nuapada, Bolangir, Ganjam and Gajapati districts. Contract farming in oilseeds has also started in the districts of Sambalpur, Deogarh, Sundargarh and Nuapada. Steps will be taken to extend it to other crops as well.

- Rural Producers' Organizations will be formed for specific commodities to enable them to have appropriate market linkages through Federations.
- The State Government are establishing two State of the Art Integrated Cotton Markets with Ginning & Bale Pressing Units at Digapahandi in Ganjam district and Paralakhemundi in Gajapati district. Upgradation of other existing Cotton Mandis will also be taken up by the State Government for providing cotton farmers good infrastructural facilities for selling their produce at remunerative prices.
- Maize is the main cash crop of Nawarangpur district and is grown abundantly by the tribal farmers. The State Government are establishing 2 Special Mandis, at a cost of Rs.150.00 lakh each for Maize at Umerkote and Raighar in Nawarangpur district for the benefit of tribal farmers.
- ➤ It has been decided that for the benefit of farmers, Market Yards will be established under the RMCs within the next three years covering all the 118 Blocks in the State which do not have Market Yards so far.
- Physical linkage of production centres to the markets by rural link roads shall be taken up in a phased manner to ensure that the farmers' produce can reach the markets.

Marketing facilities for horticultural produce: In view of the thrust being given to the development of horticulture, the production of fruits, vegetables and flowers is likely to see a quantum jump in the near future. The high levels of production can be sustained only if there is adequate infrastructure for post harvest management and marketing. The present marketing system is characterized by a long, fragmented supply chain and high wastages. The system is also deficient in providing a fair share of consumer price to the producer and in ensuring high quality and hygiene of the produce. This calls for an alternative marketing structure that provides multiple choices to farmers for sale of produce. With this in view, the Terminal Markets (TM) have been conceptualized.

The Terminal Market Complex (TMC) would operate on a Hub-and-Spoke Format wherein the Terminal Market (the Hub) would be linked to a number of Collection Centres (the spokes).

Three Terminal Market Complexes will be set in the State, one each near Cuttack, Sambalpur & Berhampur. These TMCs will be set up over an area of 50-60 acres with investment of Rs.60-70 crores each. These TMCs will be set up under Public-Private Partnership (PPP) mode.

- ➤ To enable farmers to get proper prices for their surplus paddy sold at the RMC Market Yards, facilities for cleaning and drying, grading, weighing and bagging will be provided at all those Market Yards / Sub-Market Yards/ Temporary Procurement Centres engaged in paddy procurement. The Primary Cooperative Societies (PACS / LAMPS) are being increasingly involved in procurement of paddy from loanee farmers. Sufficient facilities for cleaning and drying, grading, weighing and bagging etc. will be made available in these Market Yards / Sub-Market Yards.
- Products as per the geographical indicators will be promoted and facilities shall be provided with emphasis on networking for quality assurance, packaging and branding in order to increase agricultural exports as per the international standards/norms and facilities for patenting of technologies will be ensured.

- Production of high value crops will be provided with scope for various subsidies, grants and other concessions including financial support with low interest rates and other attractive opportunity for speeding up commercialization of agriculture through agri-preneurs and agri-business. Government will set up quality controls and testing systems to ensure consistently high quality of the products for domestic markets as well as for export.
- Agri-export Zones (AEZs) would be established in PPP mode for agricultural and horticultural produce having export potential.
- Consequent upon dismantling of quantitative restrictions on imports as per WTO Agreement on Agriculture, commodity wise strategies and arrangements for protecting the grower from adverse impact of price fluctuations in world markets and for promoting exports will be formulated. In order to protect the interest of farmers, a WTO cell at the State level will do continuous monitoring and suggest appropriate measures.
- Minimum Support Price (MSP) mechanisms will be implemented effectively across the state so as to ensure remunerative prices for the farm produce.
- ➤ Effective linkages will be promoted with other rural infrastructure development programmes such as Bharat Nirman, NREGS, BRGF, PMGSY, RGGVY, etc.

#### **WOMEN IN AGRICULTURE**

Advocacy for women's rights and gender sensitization is at the very core of developmental approaches today. Communication for social mobilization therefore should incorporate gender as an equity perspective.

- Women will be important project partners in agricultural development. So, emphasis will be laid upon capacity-building and empowerment of women to achieve the goals.
- Women friendly farm equipments will be promoted.
- ➤ The creativity, productivity and entrepreneurship of women and their capacity for furthering their skills will be dealt with special focus through gender-analysis and gender sensitization in all agricultural developmental approaches.
- Capable women SHGs will be given preference, if they come forward to deal in the agri-inputs.

#### APPLICATION OF ICT IN AGRICULTURE

Application of Information and Communication Technology (ICT) holds great promise for facilitating the development of Agriculture and allied activities in several ways. The use of internet and other electronic media can be the most cost effective and useful way of disseminating technology and commercial information to promote development of agriculture and allied activities.

The Department of Agriculture will operate internet portal to disseminate information on the recommended practices for various crops. A special technical cell shall update the information on the portal on a daily basis giving advice to farmers on specific crops. The farmers would be encouraged to send their queries to the portal for which answers would be furnished through the portal within a day. Such an interactive portal will greatly enhance the relevance of technical advice to individual farmers. A similar interactive portal will be operated by the Department of Co-operation or an independent agency dedicated to gathering market information for farmers. The information on prices of various commodities in different markets in the State will be posted on the portal on a daily basis. An e-commerce facility will be set up to facilitate online sale and purchase of agricultural produce. This would greatly reduce the transaction costs incurred by farmers in marketing their produce and enable them to secure reasonable prices.

#### **OPERATIONALISATION OF THE POLICY**

Rules and Resolutions will be framed / passed as appropriate by the Government to operationalise the State Agriculture Policy. Operational Plans to address the problems of the farmers will be prepared at the district level with involvement of all stake holders including PRIs through participatory and bottom-up planning and such District Agricultural Plans (DAPs) will be integrated into a State Agricultural Plan (SAP). The Department of Agriculture at the state level will coordinate with other allied departments to evolve appropriate mechanisms and guidelines to implement this Policy.

The Policy is intended to help in rejuvenating the agriculture sector of Orissa and bringing lasting improvement in the economic condition of the farmers. An integrated implementation of the intentions of the Government would definitely achieve the targeted annual growth rate of 4 per cent during the Eleventh Five Year Plan and ensure food and nutritional security to all the citizens of the State.

### PATTERN OF ASSISTANCE UNDER STATE AGRICULTURE POLICY 2008

Scheme	Pattern of Assistance
2	3
Capital Investment Subsidy for agri- enterprises	25% of the fixed capital (excluding the cost of the land) subject to a limit of Rs.25.00 lakh (33% limited to Rs.25.00 lakhs for SC/ST/Women/ Graduates of Agriculture & allied disciplines)
Private Lift Irrigation Projects (Jalanidhi)	
(i) Shallow tube well	50% of the project cost subject to a limit of Rs.20,000/-
(ii) Dug well	50% of the project cost subject to a limit of Rs.50,000/-
(iii) Bore well	50% of the project cost subject to a limit of Rs.50,000/-
(iv) River Lift / Surface Lift Project	50% of the project cost subject to a limit of Rs.40,000/-
Micro Irrigation	
Drip	70% of the system cost subject to a limit of Rs.30,000/- per ha.
Sprinkler	70% of the system cost subject to a limit of Rs.10,000/- per ha.
HDPE Pipes	Subsidy @ 50% limited to Rs.15000/-
For Oil Palm	
Drip	70% of the system cost subject to a limit of Rs.15,000/- per ha.
Soil Management	
Acid Soil Management	i)Assistance for application of paper Mill Sludge at a nominal users' charge of Rs.10.00 per 50 kg bag.
	ii)@ 50 % limited to Rs 750/- per ha. (Assistance for application of Gypsum at a nominal cost of Rs.14.15 per 50 Kg bag)
	2 Capital Investment Subsidy for agrienterprises  Private Lift Irrigation Projects (Jalanidhi) (i) Shallow tube well  (ii) Dug well  (iii) Bore well  (iv) River Lift / Surface Lift Project  Micro Irrigation  Drip  Sprinkler  HDPE Pipes  For Oil Palm  Drip  Soil Management

5.	Farm Mechanization	
	(i) Tractor	@ 50% of the cost, limited to R.90,000/-
		Tractors up to 40 PTO HP
	(ii) Power Tiller	(a) @ 50% of the cost, limited to Rs.60,000/-
		Power Tiller of 8 BHP & above.
		(b) @ 50% of the cost, limited to Rs.30,000/-
		Light weight power tiller below 8 BHP for hill
		regions.
	(iii) Self propelled Reaper,	@ 50% of the cost, limited to Rs.80,000/-
	paddy transplanter and	
	other similar self	
	propelled machines.	(i) © 500/ (ii)
	(iv) Specialized power	(i) @ 50% of the cost, limited to Rs.30,000/-
	driven equipments	Specialized power driven equipment like
		potato planter, potato digger, groundnut
		digger, strip till drill, tractor drawn reaper,
		cleaner-cum-grader, dryer, stubble shaver,
		mobile fruit harvester, power weeder, mini
		rice mill, dal mill, cultipacker, onion harvester with de-topping attachment, carrot harvester,
		motorized banana fibre making machine.
		(ii) @ 50% of the cost, limited to Rs.25,000/-
		Specialized power driven equipment like
		Zero-till-Seed-cum fertilizer Drill, Raised Bed
		Planter, Sugarcane cutter planter / ring pit
		digger / post hole digger, rotavator, straw
		reaper, crop reaper / binder, happy seeder,
		vegetable transplanter / pneumatic vegetable
		seeder/Axial flow thresher(tractor/power tiller
		operated)
	(v) Manually operated	@ 50% of the cost, limited to Rs.4,000/-
	implements / tools	
	(vi) Animal driven	@ 50% of the cost, limited to Rs.5,000/-
	implements	
	(vii) Animal driven tool	@ 50% of the cost, limited to Rs.12,000/-
	carrier	Animal driven specialized implements viz.
		(a) Multi tool bar / carrier / tropicultor (with
		minimum four attachments).
	( :::) D	(b) Pre-germinated paddy seeder.
	(viii) Power driven	(i) @ 50% of the cost, limited to Rs.20,000/-
	equipment (Tractor/	for essential tractor driven implements viz.
	power tiller operated)	MB / Disc plough, harrow, cultivator, seed-
	Intended inclusion of	cum-fertilizer drill.
	all tractor & power tiller	(ii) @ 50% of the cost, limited to Rs.20,000/-
	driven conventional	for a set of power tiller driven implements i.e.
	equipment /	harrow, cultivator and seed drill.
	implements.	
	(ix) Power Threshers (All	50% of the cost, limited to Rs.24,000/-
	types)	50 /0 OF THE COST, IIITHEO TO INS.24,000/-
I	typos)	

	(x) Diesel / Electric pump	@ 50% of the cost, limited to Rs.10,000/-
	sets	Diesel/electric pump sets up to 7.5 BHP / 5 KW
	(xi) Cono Weeder	Assistance @ Rs.3,000/- per farmer or 50% of the cost, whichever is less.
	(xii) Plant Protection	of the cost, whichever is less.
	Equipment	
	(a) Manual	@ 50% of the cost, limited to Rs.1600/-
	(b) Power operated	@ 50% of the cost, limited to Rs.4000/-
	(c) Tractor mounted	@ 50% of the cost, limited to Rs.8000/-
	(d) Aero-blast sprayer	@ 50% of the cost, limited to Rs.50,000/-
	(xiii) Combine Harvesters	
	(a) Self propelled track type	50% of the cost, limited to Rs.4.00 lakh
	(b) Self propelled wheel type	50% of the cost, limited to Rs.3.00 lakh
	(c) Tractor mounted	50% of the cost, limited to Rs.3.00 lakh
	combine	(Subsidy will be provided for combine only exclusive of tractor)
	HORTICULTURE SECTOR	
6.	Nursery	
	(a) Model Nursery	
	(i) Public Sector	Maximum of Rs.18.00 lakh per Nursery
	(ii) Private Sector	50%, limited to Rs.9.00 lakh per Nursery
	(b) Small Nursery	
	(i) Public Sector	Maximum of Rs.3.00 lakh per Nursery
	(ii) Private Sector	50%, limited to Rs.1.50 lakh per Nursery
7.	Vegetable Seed Production	
	(i) Public Sector, ICAR,	100% of the total cost (maximum Rs.50,000 /
	SAU, State Deptt. etc.	ha)
	(ii) Private Sector	50%, limited to Rs.25,000 / ha. (Limited to 5 ha per beneficiary)
8.	Seed Infrastructure	
	(i) Public Sector	100% cost.
	(ii) Private Sector	25% of cost.
9.	Establishment of New Gardens.	
	(i) Fruits (Perennial)	75%, limited to Rs.12750 / ha in 3
	Mango, Litchi, Anala,	instalments of 50:20:30 subject to survival of
	Orange, Lime	75% in 2 <sup>nd</sup> year and 90% in 3 <sup>rd</sup> year (Limited to 4 ha / beneficiary)
	(ii) Fruits (Non-perennial) Banana	50%, subject to limit of Rs.15,000 / ha. in 3 instalments of 50:20:30 subject to survival rate of 75% in 2 <sup>nd</sup> & 90% in 3 <sup>rd</sup> year (Limited to 4 ha / beneficiary)

	(iii) Flowers	
	(a) Cut Flowers	
	(Rose / Marigold)	
	(i) Small & Marginal	50%, limited to Rs.30,000 / ha.
	farmer	(Maximum 2 ha per beneficiary)
	(ii) Other farmers	33%, limited to Rs.23,100/- / ha.
		(Maximum 4 ha per beneficiary
	(b) Bulbous Flower	
	(Tube rose / Gladioli)	
	(i) Small & Marginal	50%, limited to rs.45,000 / ha
	farmer	(Maximum 2 ha / beneficiary)
	(ii) Other farmers	33%, limited to Rs.23,100 / ha
	( ) I	(Maximum 4 ha / beneficiary)
	(c) Loose Flower	500/ limitada Da 40,000 / la
	(i) Small & Marginal	50%, limited to Rs.12,000 / ha.
	farmer	(Maximum 2 ha / beneficiary)
	(ii) Other farmers	33%, limited to Rs.7920 / ha (Maximum 4 ha / beneficiary)
	(Contract farming) (iv) Spices / Aromatic	75%, subject to Rs.11,250 / ha
	Plants (Ginger /	(Maximum 4 ha / beneficiary)
	Turmeric)	(Maximum 4 na / beneficiary)
	(v) Plantation crops	75%, subject to Rs.11,250 / ha in 3
	(Cashew etc.)	instalments of 50:20:30 subject to survival
	(Guerren Grei)	rate of 75% in second year & 90% in 3 <sup>rd</sup>
		year.
		(Limited to 4 ha per beneficiary)
	(vi) Rejuvenation /	50%
	replacement of senile	(Limited to 2 ha per beneficiary)
	plantation	
	(vii) Post Harvest	
	Management	
	(a) Pack house	25% in general area
		33% in Hilly & tribal area
	(b) Cold Storage units	40% of the fixed capital (excluding the cost of
		the land)
	(5) 0 4 0 0 0 0	050/ in manual and
	(c) C.A. Storage	25% in general area
	(d) Dof your / contains	33% in Hilly & tribal area
	(d) Ref. vans / container	25% in general area
	(a) Mobile processing	33% in Hilly & tribal area 25% in general area
	(e) Mobile processing units	33% in Hilly & tribal area
	(f) Establishment of	25% in general area
	marketing infrastructure	33% in Hilly & tribal area
	for horticulture produce	0070 III I IIIIy & IIIDAI AIGA
	(g) Wholesale markets	25% in general area
	(g) Wholosale markets	33% in Hilly & tribal area
		coro in rinny di dibar di od
L		

(h) Rural Markets / Apni	25% in general area
Mandis / Director	33% in Hilly & tribal area
markets	
(i) Function Infrastructure	25% in general area
for collection, grading etc.	33% in Hilly & tribal area
(viii) Protected Cultivation	
(a) Green house	50% (Small & Marginal farmers)
	33% (Other farmers)
(b) Mulching	50%, subject to a maximum of Rs.7000 / ha
	(Limited to 2 ha / beneficiary)
(c) Shadenet	50%, subject to a maximum of Rs.3500 per
	500 sqm.
	(Limited to 2 ha / beneficiary)
(d) Plastic tunnel	50% subject to a maximum of Rs.5000/- per
	1000 sqm.
	(Limited to 5 ha per beneficiary)
(ix) Promotion of INM /	
<b>IPM</b>	
(a) Promotion of IPM	50%, subject to a maximum of Rs.1000 / ha.
(b) Disease forecasting	Upto Rs.4 lakh / unit
units	
(Public Sector)	
(c) Bio-control lab	
(i) Public Sector	Upto Rs.80 lakh / unit
(ii) Private Sector	Upto Rs.40 lakh / unit
(d) Plant health clinics	
(i) Public Sector	Upto Rs.20 lakh / unit
(ii) Private Sector	Upto Rs.10 lakh / unit
(e) Leaf / Tissue analysis	
lab	
(i) Public Sector	Upto Rs.20 lakh / unit
(ii) Private Sector	Upto Rs.10 lakh / unit
(x) Organic Farming	
(a) Adoption of organic	50% subject to a maximum of Rs.10,000 / ha
farming.	(Limited to 4 ha / beneficiary)
(b) Vermi-compost units	50%, subject to a maximum of Rs.30,000 per
	big unit & Rs.7,500 per small unit.
(c) Certification	Rs.5.00 lakh in cluster of 50 ha.

# LIST OF AGRI-ENTERPRISES ELIGIBLE FOR CAPITAL INVESTMENT SUBSIDY

SI. No.	Name of the Projects
1.	Commercial Floriculture
2.	Commercial Meat, Egg & Fish Production
3.	Plantation crops like tea, coffee, rubber, cocoa, cashew and oil palm
4.	Commercial calf rearing centre
5.	Commercial goat/sheep/pig rearing centre
6.	Export oriented agriculture & horticulture
7.	Freshwater pearl culture
8.	Agro Service Centre
9.	Agri- clinic and Agri- business Centre
10.	Veterinary Clinic
11.	Refrigerated Van
12.	Agro-eco Tourism
13.	Bio fertilizer Production and Marketing
14.	Soil Testing Laboratory
15.	Fingerling production
16.	Commercial Fruit cultivation
17.	Bagasse based Unit
18.	Cashew processing and other cashew nut based industry
19.	Coir based industry
20.	Jute based industry
21.	Seed Processing Plant
22.	Oil extraction Mill
23.	Cattle & Poultry /Fish Feed Plant
24.	Apiary(Bee keeping)
25.	Coconut based products
26.	Dairy farming and milk processing
27.	Squash, Jam, Jelly, pickle, etc of different fruits
28.	Fruit Pulp
29.	Vegetables & spices based industry

30.	Dehydration and canning of vegetables
31.	Frozen fruits and vegetables
32.	Cultivation and processing of mushroom
33.	Mushroom spawn production unit
34.	Meat processing unit
35.	Food Products Based on Soya bean
36.	Maize Processing Plant
37.	Product out of crop residue
38.	Tissue culture laboratory
39.	Vermiculture
40.	Bio pesticides/Bio control agent producing unit
41.	Green House, Poly House, Glass House

N.B.: The above mentioned list of enterprises can be amended/modified by the Government from time to time in the changing circumstances.

#### **ABBREVIATIONS**

AAS : Agro-meteorological Advisory Service

AEZ : Agri Export Zone

APICOL : Agricultural Promotion & Investment Corporation Limited

ATMA : Agricultural Technology Management Agency

BAP : Block Action Plan
BGJY : Biju Gram Jyoti Yojana
BKVY : Biju Krushak Vikas Yojana

BPL : Below Poverty Line

BRGF : Backward Region Grants Fund
BTT : Block Technology Team
CBO : Community Based Organisation

CIFA : Central Institute for Fresh water Aquaculture

CIG : Common Interest Group
CRRI : Central Rice Research Institute
DAP : District Agricultural Plan

DFID : Department for International Development FIAC : Farm Information and Advisory Center

FFS : Farmers' Field School
FIG : Farmer Interest Group
FSI : Farmers Scientist Interaction
GKM : Gram Krushak Manch
GM : Genetically Modified

GSDP : Gross State Domestic Product HRD : Human Resources Development

ICT : Information and Communication Technology IEC : Information, Education, Communication

IMAGE : Institute on Management of Agricultural Extension

IMD : Indian Meteorological Department
INM : Integrated Nutrient Management
IPM : Integrated Pest Management

KCC : Kissan Credit Card
KSK : Krishi Sahayak Kendra
KVK : Krishi Vigyan Kendra

LAMPS : Large Area Multi Purpose Co-operative Society

LIP : Lift Irrigation Point MSP : Minimum Support Price

NAIS : National Agriculture Insurance Scheme

NGO : Non-Government Organization
NHM : National Horticulture Mission

NREGS : National Rural Employment Guarantee Scheme

NRM : Natural Resource Management
OAPM : Orissa Agricultural Produce Market
OSSC : Orissa State Seeds Corporation
OSSCA : Orissa State Seeds Certification Agency
OUAT : Orissa University of Agriculture & Technology
PACS : Primary Agriculture Cooperatives Societies
PIM : Participatory Irrigation Management
PMGSY : Pradhan Mantri Grama Sarak Yojana

PPP : Public Private Partnership PRI : Panchayati Raj Institutions

RGGVY : Rajiv Gandhi Grameen Vidyutikaran Yojana RITE : Regional Institutes on Training and Extension

RMC : Regulated Market Committee

SAP : State Agriculture Plan SHG : Self Help Group

SREP : Strategic Research Extension Plan
SRI : System of Rice Intensification
SRR : Seed Replacement Rate
TMC : Terminal Market Complex
WTO : World Trade Organization