Operational Guidelines
for

MANAGEMENT SUPPORT GROUP

For

Programme of Integrated Development of Pulse Villages in Rainfed Areas

SMALL FARMERS' AGRIBUSINESS CONSORTIUM
Department of Agriculture & Cooperation

1. INTRODUCTION

1.1 As a follow-up to the announcement made in the Budget Speech of the Hon'ble Finance Minister, Dept. of Agriculture has launched the **Programme of Integrated Development of Pulse Villages in Rainfed Areas** during 2011-12 with an outlay of Rs. 300 crore. Dept. of Agriculture and Cooperation (DAC) has already issued guidelines for the programme under RKVY. The task of management and technical support, including end-to-end solutions to assist the States to plan, implement, monitor, support and report on the programme, has been entrusted to Small Farmers' Agribusiness Consortium (SFAC), a society promoted by DAC.

1.2 SFAC proposes to deliver a range of technical and management services through the creation of a **Management Support Group (MSG)**, comprising experienced professionals with expertise in project management, agronomy, monitoring and evaluation and statistics to support the Crops Division in DAC in the roll out and monitoring of the programme. The MSG will be mobilized by SFAC by selecting a suitably qualified consultancy organization through an open bidding process. The selected partner organization will be expected to provide the technical manpower in the formation proposed below, besides overall coordination, supervision, technical backstopping and reporting inputs. A detailed profile of the MSG and terms of reference are provided later in this proposal.

2. RATIONALE AND TERMS OF REFERENCE

The need for creating a special team of professionals to support the roll out of the pulses production programme is felt necessary for the following reasons:

1. The programme is in a pilot stage and needs to be conceptualized and implemented in a project mode, for which both the DAC and States require the support of a multi-disciplinary team from the planning to implementation and monitoring stage.

2. The planning and administrative capacity to use CSS support in a project mode is lacking in a majority of the target states, thus raising the possibility of uneven roll out, missed deadlines and poorly monitored outcomes. The MSG will provide hand-holding support to the States through the course of the year, thus providing a model for future replication.

3. The MSG will facilitate close monitoring and outcome evaluation by DAC and enable a quick assessment of results to support the case for continuing the programme during the XII Plan period with higher financial outlays.

The **terms of reference (TOR)** of the Management Support Group (MSG) are as follows:

i) To work as the Technical Support Group of the Crops Division of DAC for overall coordination and monitoring of the programme, including technical backstopping, monitoring and evaluation and troubleshooting.

ii) To support the roll of the programme by providing guidelines and advisories to identify suitable areas for intervention and facilitate the preparation of detailed plan for production of pulses.

iii) Appraise the project proposals submitted by the implementing agencies and the states for approval of DAC

iv) Coordinate with the existing seed development agencies for supply of quality seed and facilitate large scale multiplication of quality seed

v) Provide necessary guidelines and technical support for building farmer producer organizations and facilitating linkages to investment, technology and markets

vi) Capacity building at all levels by organizing training and workshops for taking up all the activities under the programme, including developing production-market information and intelligence, e-pest management system, and the concepts and practices of GAP, IPM and INM

vii) Perform all the management functions, including end-to-end solutions to plan, monitor, support, and report on the programme, on behalf of Small Farmers' Agribusiness Consortium (SFAC).

viii) To work as the single point support system of DAC to implement the pulses programme in the target states for overall improving the production and productivity of pulses in the country by offering a complete package of activities resulting in increase in farm income and improvement in overall livelihood.

3. STRUCTURE OF MSG

3.1. REQUIREMENT OF MANPOWER

Considering the large variation in the percentage of area under pulses in different states, varying from 2.6% in Tamilnadu to as high as 18.6% in M.P., the required number of project units at SFAC HO and the area covered are indicated below:

Sl No.	State	Area under pulses		No. of Project Units
		in 000 ha	% share	
1	A.P	1984.00	9.0	**1**
2	Karnataka	2369.00	10.7	
3	Tamilnadu	563.50	2.6	
4	M.P.	4108.10	18.7	**1**
5	U.P.	2724.30	12.3	**1**
6	Bihar	607.00	2.7	
7	Gujarat	1000.00	4.5	**1**
8	Rajasthan	3207.60	14.5	
9	Maharashtra	3828.00	17.3	**1**
10	Orissa	791.00	3.6	**1**
11	Chhattisgarh	908.70	4.1	
	Grand Total	**22091.20**	**100.0**	**6**

Each of the six project units will be headed by a Project Manager with sufficient experience in project management, who will be backstopped by a multi-specialist team including Community Organizer, Economist/Statistician, Pulse Specialist, Plan Protection and IT Specialist. The team will be headed by a Programme Manager of considerable rich experience of management of a large project of multi-disciplinary in nature. There will be three supporting staff to assist the unit. The entire MSG will be located at SFAC HO in New Delhi, with frequent travel to the States envisaged for the technical staf.

The diagrammatic presentation of MSG is indicated in Fig 1.

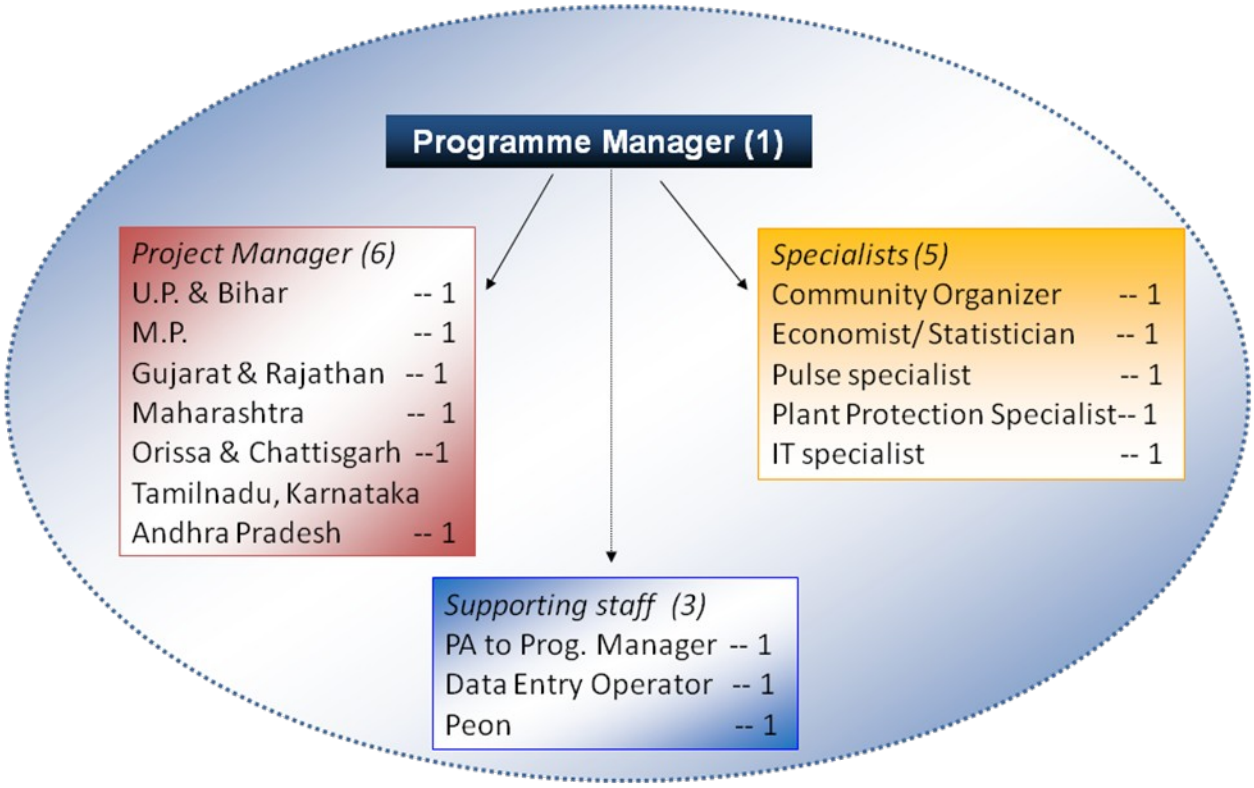

Fig. 1: Diagrammatic presentation of MSG

3.2. FUNCTIONS OF MSG

The broad tasks of the MSG will be as follows:

i) Work as the single point support system of DAC to implement the pulses programme in target state

MSG will function as the single point support system within the frame work and overall policy guidelines of DAC for entire management of the 'Programme of Integrated Development of Pulse Villages in Rainfed Areas' in all the eleven States by carrying out

all the activities involved in planning, implementation, monitoring and evaluation of the programme.

ii) Assist the State Governments by organizing training inputs and workshops and act as a Technical Support Group to explain the objectives and goals of the pulses programme

MSG will assist the State Governments in setting up goals and objectives of the programme including the projected output, outcome and impact of the programme in a frame work of timeline through conducting trainings and workshops in all the eleven States with the active participation of each of the State Department of Agriculture, officials of the related line departments, members of the gram panchayats and other related agencies.

The MSG will also facilitate during the workshops an operational process by analyzing each component including strength, weaknesses and opportunity in pulses in the projected State with series of brainstorming sessions to discuss on problems and solution in water management and input supply and finally will come up with a development programme of pulse with institutional arrangement for supply of inputs including hybrid varieties of seeds.

iii) **Provide guidelines and advisories to develop projects to the States/ Implementing Agency**

Pulse villages in the Rainfed areas in the selected States with no assured irrigation source would only be targeted for the implementation of the programmes prescribed under the scheme. The implementation of the programme would be watershed centric as followed during 2010-11. However, States included in the programme of 2010-11 are advised to select the villages other than the ones that were taken up last year in the same watershed areas. Entitlement of each State would be dependent on the area under Pulses. States would be required to prepare a technical plan for approval of the Management Support Group (MSG).

iv) **Capacity building at all levels through both trainers and farmers training programme**

The areas of capacity building will include steps of preparation of detailed action plan, formation of Farmer Producer Organizations (FPO) by the implementing agencies, guidelines on construction of small farm ponds, developing market information and intelligence including production intelligence, steps in organizing demonstrations farms in the line of Good Agricultural Practices (GAP), IPM, INM, ICM in each cluster of farmers, establishment and monitoring of centralized e-pest surveillance system, techniques of on-farm production of low cost quality inputs for sustainable pulse production system, establishment of ICT enabled monitoring system, and measurement of output, outcome and impact of the project. In order to implement the training program

successfully, trainers' training manual on the major areas of capacity building will be developed, to be supplemented with trainees manual to be prepared in the respective state language.

v) Preparation of detailed action plan for 2011 to 2012 covering 11 states

The action plan for 'Programme of Integrated Development of Pulse Villages in Rainfed Areas' will begin with an overview emphasizing the significance of increased production and productivity of pulses in alleviating hunger, nutrition and poverty. The overview must provide a clear understanding of the status of pulse production in the state, the constraints of resources in the state, capacity to manage them, overall to provide a solid base for working out the steps to be taken up for enhancing pulse production and productivity. The basic components of an Action Plan are as follows:

a. A statement of what must be achieved

b. Steps that have to be followed to reach this objective

c. Time schedule for when each step must take place and how long it is likely to take (when)

d. A clarification of who will be responsible for making sure that each step is successfully completed (who)

e. A clarification of the inputs/resources that are needed

f. Methodology of monitoring and evaluation of the programme

Essentially, the action plan would include a general goal with macro and micro directives in a specific time frame involving a package of investments, policy measures and institutional and other actions to achieve these objectives both long and short-term in limited or comprehensive with single or multi sector perspective.

vi) Appraise project submitted by the implementing agencies and States for approval by DAC

The project appraisal essentially refers to the process of analyzing the technical feasibility and economic viability of a project. The basic steps of project appraisal would include the followings:

- Process followed in identification of process
- Project need analysis
- Problem formulation and Statement of the Problem
- Project Planning including logical linkages among various element of projects
- Availability of technology included and feasibility of their performance
- Clarity of the assumptions for project budgeting
- Technical and managerial competence of the institutions and other stakeholders involved
- Monitoring processes, and finally

- Project evaluation including goal-based evaluation, process evaluation, impact evaluation and cost-benefit analysis

vii) **Provide necessary guidelines for development of Farmer Producer Organizations (FPO)**

In the context of the farmers disposing off their produce largely in unprocessed form resulting no value addition and further plough back, Producer Organization is found to be one of the possible solutions. Besides meeting the consumption needs the expectation of the farmers is to get a reasonable return on the time and money invested by him and to increase his share in the total amount, a consumer pays while buying the same produce. There are a number of intermediaries who share more than the share of the producers resulting both higher purchase price by the consumers and lower sale price by the producers.

With the increasing impetus for development of agri-business enterprises in the country, along with substantial investment in capital infrastructure for building the supply chain, the agri-business enterprises look for consistent, continuous, and adequate supplies of produce on an ongoing basis, which is only possible through the formation of Farmers Interest Groups (FIG).

The FIG is expected to mobilize the farmers into producers' collectives. The standard structure of an FIG will be around 20-25 members each at the village level depending upon the location of implementation. In order to facilitate large scale demonstration and achieve economies of scale, there should be at least 200 FIGs per district by mobilizing minimum of 5000 producers per district. FIGs along with promoting agency will focus upon technology transfer, inputs, credit and marketing.

Once the FIGs are stabilized, each FIG will be federated into a Farmer Producer Organization/ Farmer Cooperative/ Farmers Association depending on their preference in each cluster, where the members of the FIGs will become equity holders. About 1000 farmers will be federated in each such institution. However, this number may vary as per local requirements. This body will eventually become the formalized local institution of farmers to address the issues of agribusiness and agriculture extension. A trained team of agribusiness professionals to be designated by MSG, will help them to plan and implement their business plans.

viii) Provide technical support for construction of small farm ponds/ dug well at farmers field for life saving irrigation

The MSG will provide technical backstopping for water conservation and management through ponds/ dug well drip irrigation. The ponds will be constructed in clusters of individual farmer field for storage of rainwater under the close supervision of a technical team to be designated for the purpose. The complete guideline for appropriate size of ponds / dug well and polythene management for efficient water saving will be decided by a number of technical teams depending upon irrigation requirement in different rainfall

zones under different soil conditions. Wherever, the ground water is available, the committee will be provided supervision for construction of dug well.

ix) **Facilitating technology backstopping to the implementing agencies**

The expertise of Indian Institute of Pulses Research (IIPR), Kanpur and the State Agricultural Universities (SAUs) are to be considered. Overall, IIPR should take the lead for providing technological backstopping through the specialists engaged in the All India Coordinated Research Projects (AICRPs) on the specific pulse crop in the State Agricultural Universities. The MSG and IIPR will organize a specially designed workshop to sensitize both the implement agencies and the specialists engaged in the AICRPs for their specific role to play for the crops to be taken up under the programme in the country.

x) Develop market information and intelligence including production intelligence to finalize location specific crops and varieties depending on the farming systems and situations

Increased profitability and income is the key to success to make farming a profitable business enterprise. In order to make the agriculture product and by-product market compatible, the MSG will develop an institutional arrangement to provide market information and intelligence to the farmers including product information guide, product specification and pricing, product production procedure, product production reporting procedure, product production certification procedure, details of supply chain and linking arrangements and finally accessibility to the market chain. The information should also include market rates of major agricultural commodities of the nearest markets, and quantity and quality of produce received in the nearest market.

Regular Market Intelligence will include expected area sown, crop conditions and yield assessment, price trend and forecast, and likely gluts and shortages of agricultural commodities. Agriculture market news may include detailed news on top milk producer, fish variety approved, import export trend, reasons for declining export, increase in import price, etc. This information needs to be upgraded on weekly basis and to be made available on-line to facilitate appropriate strategies.

xi) **Support for development of Demonstration Farms in the line of Good Agricultural Practices (GAP), IPM and INM in each cluster of farmers depending upon its appropriateness**

Food safety being an emerging key issue, there is need to follow Good Agricultural Practices (GAP), in order to meet strict quality measures. The MSG will sensitize State Governments and Stakeholders for enhanced implementation of GAP through organizing workshops and develop awareness about the standard guidelines of organic farming including the standards required for export already set up by World Trade Organization and the importing countries to enable to execute agri-exports and attain a good share with better price realisation in health conscious segment of niche market.

To promote INM, assistance for promotion of micronutrients/lime/gypsum (including liming material and phosphor gypsum and pyrites) will be provided as per guideline of National Food Security Mission (NFSM).

Integrated Pest Management (IPM) means control of pests including weeds using all means of pest control in an integrated manner. However, assistance for IPM and its various components has been provided under four sub-components i.e. assistance for IPM in pulses; supply of Plant Protection Chemicals; supply of Nuclear Polyhedrosis Virus (NPV) and supply of weedicides. All these provision may be used as recommended by the SAUs/ICAR Institutes/ Directorate of Plant Protection and Quarantine, Government of India. Major components of IPM will be as follow:

1. Seed Treatment with *Trichoderma* or pesticides
2. Use of Pheromone traps to monitor the intensity of pest. Number of pheromone traps should be 5 per hectare
3. In case the pest build up is up to or higher than the Economic Threshold Level (ETL) then apply NPV and biopesticides like neem oil.
4. If the pest is not controlled then farmers should use Plant Protection Chemicals.
5. Regular monitoring for appearance of symptoms for disease should be carried out and in case of appearance of disease then chemical should be immediately applied.

The IPM assistance for pulses will be provided as per NFSM, which include; (i) use of Pheromone traps; (ii) mechanical control through collection and destruction of egg masses, larvae and adults; (iii) use of light traps; (iv) biological control by conserving naturally occurring parasites, predators and pathogens; (v) use of bio-pesticides shall be strictly in accordance with the recommendations of SAUs/ICAR/ Central Biological Control Laboratories of the Directorate of Plant Protection Quarantine & Storage

xii) Provide support for establishment and monitoring of centralized e-pest surveillance system

Pest Surveillance today is an important part of plant protection initiatives by various Governments and Private Organizations associated with increasing productivity of Agricultural yields. An Information and Communication Technology enabled pest surveillance system will be introduced to automate and standardize the information including pest diseases in plants with its remedial measure with early warning system. ePest Surveillance system will be designed to make up for the weaknesses of the manual data collection and provide a quicker solution of pest hazards in the cropping system. This system provides real-time data; no delays; Standardize collection and data input; Data uses immediate; depends on user needs. This System uses the GPS and GIS to increase predictive capabilities for pest detection and management. The e-pest surveillance system used to consolidate the collection of data from the field using ICT as a tool with ground validation.

xiii) **Coordinate with National Seed Corporation (NSC), State Farm Corporation of India (SFCI), State Seed Corporation (SSC) and State Agricultural Universities (SAUs) for making available quality seeds to the implementing agencies**

Seed is the most important input which determines the production and productivity of any crop. In order to provide quality seeds to implementing agencies, MSG will develop an institutional arrangement with National Seed Corporation (NSC), State Farm Corporation of India (SFCI), State Seed Corporation (SSC) and State Agricultural Universities (SAUs) for providing support at all levels, starting from production of breeder seed, production of foundation and certified seeds.

As per the guideline of NFSM, the following will be considered for the production of Breeder Seeds of pulses:

- The breeder seeds of varieties released within 10 years will be produced by ICAR/SAUs system based on the breeder seed plan approved by Seed Committee (SC).
- Indian Institute of Pulses Research (IIPR) will be the nodal agency for organizing production and supply of breeder seeds.
- IIPR Kanpur will develop a master plan for the production of breeder seed under which specific institutions would be identified for the production of Crop wise, variety wise, institution wise production targets fixed will be made public and seed producing agencies will be required to place the indents for supply of breeder seed

For the supply of breeder seeds of Pulses, the seed producing agencies will be required to place the indent for supply of Breeder seed to seed division of Department of Agriculture and Cooperation (DAC) of Ministry of Agriculture, Government of India (GOI) and a copy to IIPR. However, before placing the seed indent to seed division the same should submitted to seed committee who will examine and approve it. DAC in consultation with IIPR will allocate the breeder seed and the concerned agency would lift the breeder seeds as per the allocation made on payment basis. The entire cost of purchase of breeder seed will be reimbursed by NFSMEC under NFSM-Pulses to the concerned seed producing agencies in the public and cooperative sector through the respective State Governments. The assistance will be available only for varieties which are less than 10 year old.

For the production of Foundation and Certified Seed of Pulses, the following will be considered:

- Foundation seed will be produced by SFCI/NSC/SSC/SAU/KVKs, Seed production farms of State Governments, NAFED, IFFCO, KRIBHCO, other seed producing agencies in the cooperative and the private sector.
- The certified seeds produced by the agencies listed above under seed village scheme will also qualify for production subsidy provided such seed is certified.

- The production subsidy for foundation and certified seed will be provided to those varieties which are less than 10 year old. Foundation seed stage-I and stage-II as well as certified seed produced from certified seed as provided in the National Seed Policy will also be eligible for production subsidy. If the certified seed is produced from certified seed, then this reproduction will not exceed three generations beyond foundation stage-I and it will be ascertained by the Certification Agency that genetic identity and genetic purity has not been significantly altered
- State Seed Corporations/NSC/SFCI/NAFED/KRIBHCO/IFFCO and other seed producing agencies in the cooperative and the private sector will be required to formulate annual seed production plans for production of foundation and certified pulse seeds. National level seed producing agencies will submit these plans to SC while the state level agencies would submit these plans to their respective State Departments.

xiv) Provide support to the implementing agencies for development of seed villages for large scale multiplication of quality seeds

Seed is the starting point of agriculture and dictates ultimate productivity of other inputs. Good quality seed alone increases the yield by 15-20 per cent.

A village, wherein trained group of fanners are involved in production 'of seeds of various crops and cater to the needs of themselves, fellow fanners of the village and fanners of neighboring villages in appropriate time and at affordable cost is called "a seed village". The establishment of a seed village will have two phases,

I. Seed production

Seed village concept is to promote the quality seed production of foundation and certified seed classes. The area which is suitable for raising a particular crop will be selected, and raised with single variety of a kind. The area with the following facilities will be selected:

- Irrigation facilities
- Suitability of climatic conditions to raise the crop for more than one season
- Labour availability
- Knowledge of local farmers on that particular crop
- Occurrence or out break of pest and diseases
- Past history of the area for suitability to raise seed crop
- Average rainfall and distribution
- Closeness to a urban area for easy movement of seed and other inputs

In order to harness the synergy between technologies and the community participation, special emphasis is being given to build farmer's capacity to produce quality seeds. Training on seed production and seed technology to the identified farmers for the seed crops grown in the seed villages will be given for technology empowerment of farmers. A seed grower forum will be organized for further empowerment of technology and marketing.

II. Establishing seed processing unit

Post-harvest seed handling is a vital component of the total technology in marketing available good quality seeds of improved varieties. The location of seed processing centers will be selected depending upon available infrastructure and convenience including connectivity with roads and transportation facilities. Each seed processing center will be equipped with adequate facilities including a suitable building, cleaning, packaging, storage, threshing and drying and information center.

xv) Provide support for identification of low cost quality inputs for sustainable pulse production system

To make the pulse production sustainable, there is need to renounce as far as possible the use of external inputs like agrochemicals and to optimize the use of locally available resources. On-site fermentation of microbial based manure, NADEP and Cow Pat Pit are important resource compatible practices, economically competitive making the cost of production more sustainable and less dependent on external input, the appropriate assistance will be provided by the scheme to promote these practices in pulse programme.

xvi) Provide marketing support through linking producer, consumer and other stakeholders and Government agencies

As indicated in point 4, an effort will be made in formation of Farmers' Producers Organizations. These FPO will be linked with agri-business enterprises/ houses like Wal-Mart, Food World, Spenser, Reliance Fresh, Big Apple etc. through appropriate MOUs for continued supply of farm produce.

xvii) Addressing overall Management of the programme including its implementation and monitoring of physical and financial components on real time basis through establishment of an ICT enabled monitoring system to with ground truthing both on-farm and off-farm

The unique feature of the programme "Programme of Integrated Development of Pulse Villages in Rainfed Areas" is its implementation by providing advisory services based on real time crop conditions. Such services will include weather forecasting, weather and crop advisory; SMS based services; solution to farmers' problems through call center; cropped area, crop conditions and yield assessment; market information on quality, price and quantity of arrivals, minimum support price and day to day market rates, availability of agricultural inputs and there prices; and forecast on expected arrivals of farm commodities in mandis as assessed from crop condition and yield assessment.

Further, ICT based monitoring will be done through real time cropped area and crop growth providing much needed flexibility for appropriate advisory services and even redesigning the format and procedure based on the change in situations on real time basis.

Overall, the management system will involve inter-sectoral, inter-organizational and interpersonal communications coupled with consensus-building, negotiation, networking and multidisciplinary capacity building in a multi-cultural settings.

xviii) **Provide guidelines for qualitative measures of data management and results analysis to get output, outcome and impact of the programme**

In addition to the first hand information through various formal reports, project schedule chart, project financial status report and other such periodical report, there will be concurrent evaluation of the programme in the form of output, outcome and impact. While the output describes the concrete and tangible products as a result of the development activities undertaken under the programme, the outcome describes the changes that occur among the beneficiaries, the impact describes the overall changes that occur among the beneficiaries in terms of transformation of the target groups.

The output, outcome and impact would be assessed to begin with, early evaluation followed by various concurrent evaluation while monitoring the programme and finally terminal evaluation.

The MSG will work under the overall supervision and direction of JS (Crops), DAC. However, on a day-to-day basis, MD SFAC will monitor the working of the team, track deliverables and provide administrative backstopping. SFAC will also coordinate overall monitoring of the programme in close coordination with JS (Crops).

6. MONITORING

The programme will be continuously monitored through ICT enabled monitoring system to be specially designed for the purpose. Besides entries related to the individual beneficiaries, reports of the periodical field visits of the Programme Manager, Project Managers and the Specialist, and the proceedings of the workshop, review meetings at various levels will be considered. Special evaluation studies will be commissioned to access the output, outcome and impact of the programme including its geographical and spatial distribution.

Annexure

Detailed Profiles of MSG members (Pulses Programme)