

**DIRECTORATE OF AGRICULTURE & FOOD PRODUCTION, ODISHA,
KRUSHI BHAWAN, BHUBANBSWAR.**

No: 2MA(10)4/2019 - 19518 /Agril. Date: 18-07-2019

To

The Deputy Director of Agriculture, Rayagada/ Kandhamal/ Kalahandi/
Koraput/ Boudh/ Sambalpur/ Jharsuguda/ Nuapada/ Bolangir/
Keonjhar/ /Dhenkanal/ Mayurbhanj

**Sub:-Action Plan on Farm Mechanization and Irrigation infrastructure-
CRLP/CBW/CBW(Solar)/CSTW under the project "Promotion of
Agriculture Production Clusters (APCs) in Tribal Regions of Odisha"
for the year 2019-20**

Sir,

With reference to the subject cited above, I am enclosing herewith the Annual Target on Farm Mechanization and Irrigation Infrastructures-CRLP/CBW/CBW(Solar)/CSTW under the project "Promotion of Agriculture Production Clusters (APCs) in Tribal Regions of Odisha"

Further, it is to mention that this is a convergence programme under different ongoing schemes to be implemented with involvement of facilitating NGOs in 40 identified APC blocks of 12 tribal districts following the existing guidelines and there is no separate financial allocation for these activities under this project. The details of the project along with list of facilitating NGOs are also enclosed herewith for your reference.

You are requested to allocate the block wise programme in your district. Priority should be given to the identified APC blocks to ensure maximum number of household access to these activities for successful implementation of the project.

Yours faithfully



Director of Agriculture &
Food Production, Odisha

P. T. O.

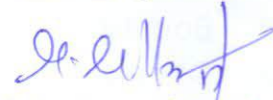
Memo No.

19519

Dt.

18-07-2019

Copy along with district wise action plan submitted to Principal Secretary, Department of Agriculture and Farmers' Empowerment, Govt. of Odisha for kind information.



Director of Agriculture &
Food Production, Odisha

Memo No.

19520

Dt.

18-07-2019

Copy along with district wise action plan forwarded to the Director, Horticulture, Odisha, Bhubaneswar for information and necessary action.



Director of Agriculture &
Food Production, Odisha

Memo No.

19521

Dt.

18-07-2019

Copy along with district wise action plan forwarded to the Chief Engineer(Agril) O/o- DA&FP(O), Bhubaneswar for information and necessary action.



Director of Agriculture &
Food Production, Odisha

Memo No.

19522

Dt.

18-07-2019

Copy along with district wise action plan forwarded to Programme Secretariat, PRADAN, MB-36, Badgada Brit Colony, Near Saraswati Sishu Mandir, Bhubaneswar-751018 (email:apcprogrammeseecretariat@pradan.net) for information and necessary action.



Director of Agriculture &
Food Production, Odisha

ACTION PLAN OF &DA&FP(O) for 2019-20

Project - Promotion of Agriculture Production Clusters (APCs) in Tribal Regions of Odisha

Sl. No.	Name of the Activity	Name of the schemes for convergence	Rayagada	Kandhamal	Kalahandi	Koraput	Boudh	Sambalpur	Jharsuguda	Nuapada	Balangir	Keonjhar	Dhenkanal	Mayurbhanj	Total	
1	No. of HHs having access to farm mechanisation															
	Spl. Power Weeder	BGREI	40	0	50	60	20	50	0	0	20	0	30	60	330	
	Transplanter		10	0	50	15	3	90	0	0	10	0	0	5	45	228
	Transplanter (riding type)		0	0	0	0	0	1	0	0	0	0	0	0	0	1
	Rotavator (5 ft)		15	0	50	20	20	20	20	0	0	20	0	20	20	185
	Rotavator (6 ft)		15	0	50	20	10	20	20	0	0	20	0	20	20	175
	Spl. Power Multi Crop Thresher	30	0	50	30	20	20	50	0	0	30	0	50	50	310	
	Power driven equipments	8	10	9	10	10	15	15	10	10	8	8	11	10	119	
	Pumpsets	50	230	40	40	30	30	30	280	280	30	230	30	30	1300	
	Power driven equipments	15	14	34	15	10	18	18	20	17	15	17	15	22	212	
	Pumpsets	75	40	150	150	50	80	80	50	73	130	110	40	150	1098	
	Tractor	24	17	41	24	17	36	36	19	22	34	26	19	36	315	
	Rotavator	35	30	150	40	25	60	60	45	100	80	85	40	105	795	
	Combine Harvester	25	11	40	15	5	45	45	10	12	18	25	10	25	241	
	Power tiller	4	2	14	4	2	12	4	4	4	6	4	3	8	67	
	Spl. Power driven equipments (M.C.)	50	39	120	80	50	85	60	60	59	75	110	60	105	893	
	Total of Farm Mechanization	16	11	32	17	16	22	22	17	11	31	17	17	32	239	
	Total of Farm Mechanization	412	404	880	540	288	634	515	588	527	632	370	718	6508		
2	Irrigation infrastructures :No. of CRLP/CBW/ CBW(Solar)/ CSTW															
	CRLP	1	0	0	1	0	0	0	0	0	0	0	0	2	4	
	CBW	1	0	2	0	0	1	0	0	0	0	0	2	0	6	
	CBW(Solar)	1	0	2	1	0	1	0	0	0	2	1	0	5	13	
	CSTW	3	0	0	0	0	0	0	0	0	0	0	0	1	4	
	Total of Irrigation Infrastructure	6	0	4	2	0	2	0	0	0	2	1	2	8	27	

N.B.:- The Target under the above component may change depending upon the financial allocation

Block and Partner NGO List

62

Sl. No.	District	APC block	Partner NGO responsible for the block
1	Kandhamal	Phulbani sadar	PRADAN(Professional Assistance for Development Action)
2		Balliguda	PRADAN
3		K. Nuagaon	PRADAN
4	Rayagada	Kolnara	PRADAN
5		Bisamkatak	Harsha Trust
6		Muniguda	Harsha Trust
7	Kalahandi	K singhpur	Harsha Trust
8		Lanjigarh	Jana Sahajya
9		Thuamal Rampur	Jana Sahajya
10	Koraput	Golamunda	AJSA (Anchalik Janaseva Anusthan)
11		Boriguma	Harsha Trust
12		Dasmantpur	CYSD(Centre for Youth and Social Development)
13		Semiliguda	FES (Foundation for Ecological Security)
14		Pottangi	FES
15		Nandpur	PRADAN
16		Lamtaput	PRADAN
17		Boipariguda	CYSD
18	Keonjhar	Kundra	Harsha Trust
19		Jhumpura	IDA (Ideal Development Agency)
20		Patana	PRADAN
21		Banspal	PRADAN
22		Harichandanpur	Shristi
23	Mayurbhanj	Keonjhar Sadar	IDA
24		Jashipur	PRADAN
25		Karanjia	PRADAN
26		Thakurmunda	CYSD
27	Dhenkanal	Khunta	Shristi
28		Kankadahad	Shristi
29		Belpada	Adhikar
30	Bolangir	Khaprakhol	Vikalpa
31		Bangomunda	SSS(Shramik Shakti Sangha)
32		Tureikela	BGS(Bolangir Gramodyog Samiti)
33		Murivahal	JMA (Janamukti Anusthan)
34		Nuapada	Khariar
35	Boden		Lokdrusti
36	Jharsuguda	Laikera	SEWA (Social Education for Women's Awareness)
37		Kulabira	SEWA
38	Sambalpur	Jamankira	SIDI(Sambalpur Integrated Development Institute)
39		Kuchinda	SIDI
40	Boudh	Kantamal	YCDA (Youth Council for Development Alternatives)

Annexure-I: Brief of the project, proposed blocks and activities

1. Executive summary of the project:

This is a project of Department of Agriculture and Farmers Empowerment, Govt. of Odisha for promotion of Agriculture production cluster in highland regions of the Odisha funded by Odisha livelihood Mission of Panchayati Raj & Drinking water Department, APICOL in partnership with Bharat Rural Livelihoods Foundation (BRLF) and a national level NGO PRADAN (professional Assistance for Development Action). The schemes available with Directorate of Horticulture, OAIC, OLIC and other relevant Departments will be converged for creation of livelihood infrastructures required for farmer in the region.

This project will trigger growth in farm sector with an objective of sustainably doubling the income of 1- Lakh small and marginal farmers by establishing Agriculture Production Clusters (APCs) in 40 backward blocks of 12 highland districts in the state.

Around 20-150 Farmers will be organized into micro Agriculture Production Clusters or Producer Groups (PG) and will be facilitated to practice synchronized market linked production of identified crops especially horticultural crops covering around 40 acres in a contiguous manner. 3000 to 5000 farmers of these Producer Groups (20-25 Micro APCs) will be aggregated to form the Agriculture Production Cluster/ Producers Company (PC) at appropriate level. **Total 30 APCs will be promoted in 40 Blocks involving around 650 micro APCs covering 100000 farmers.**

Season wise 2-3 crops per PG/ mAPC will be selected looking at market attractiveness, small holder suitability and agro ecological compatibility. Already there are some focus crops identified for the state (e.g. Onion, Tomato, Cashew, etc) which will be included as per the context. As a sustainable measure non pesticidal management (NPM) practices will be introduced in 40% of the areas.

To augment the livelihoods of the farmers livestock rearing (Goat, Sheep and BYP rearing) is also planned with around 40% of the families in these clusters.

Livelihood assets like irrigation in 16000 acres, orchard development in 8000 acres, farm mechanization access to 70000 farmers and shed for Goat and Backyard poultry with 30000 farmers will be converged from existing schemes in these regions to intensify the interventions. Around 750 market linked Agri- Entrepreneurs will be groomed and nested as value chain enablers in these regions. In these regions market routes and actors around identified commodities will be developed.

This programme is for a period of four years, where intensive support will be provided for 3 years. Last one year will be a phase for consolidation without any financial implication.

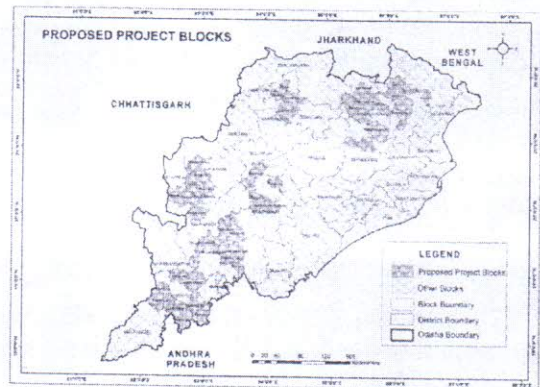
BRLF will bring in their Partner NGOs to work in partnership with BMMU & Block level ATMA and DMMU & District level ATMA to support in mobilizing community, strengthening producers' institution and support the department in implementing the schemes. PRADAN as a nodal NGO will build capabilities of the NGOs, develop implementation modalities and support the department in design, management and monitoring.

The total estimated cost of the project is Rs. 401.60 crores (Rupees Four hundred one crore and sixty Lakh only) out of which Odisha Livelihood Mission of Panchayati Raj & Drinking water

Department would support 70.06 crores for Institution and Capacity building cost, APICOL will mobilise Rs.17.80 Crores, and Agriculture and Farmer's Empowerment Department and other relevant departments would mobilize around Rs. 293.40 Crore or more through convergence of existing programmes, while BRLF will bring in Rs. 16.74 Crore from its own resources and around Rs. 3.6 Crore will be contributed by the participating CSOs for facilitation and smooth implementation of the project.

2. Objectives of the Project:

- To trigger growth in farm sector with the objective of sustainably double the income of 1- Lakh small and marginal farmers in the backward highland regions of the state,
- To establish the model of Agriculture Production Cluster (APC) in 40 backward blocks of the state, as an effective method to organize production system and services of markets.



3. Coverage and Geography:

Figure 1: Proposed project district and blocks

The programme will be taken up in highland regions of the state. The districts and tentative no. of blocks are mentioned in the table. Blocks from the selected districts having more than 35% of schedule caste and schedule tribe where there is a level of social mobilization by the NGOs with support from BRLF. Effort has been made to cover more no. of OLM's intensive blocks.

This will help the farmers to directly enter into the activities with the existing base of social mobilization.

Table 1 : Proposed Districts

S.N	Districts	SC&ST %age	Tentative No. of Blocks	Remarks
1	Rayagada	70	4	Scheduled districts
2	Kandhamal	69	3	
3	Mayurbhanj	64	4	
4	Koraput	63	8	Blocks in the districts are poor/ scheduled
5	Keonjhar	56	5	
6	Kalahandi	46	3	
7	Dhenkhal	31	1	
8	Jharsuguda	49	2	
9	Sambalpur	51	2	
10	Bolangir	38	5	
11	Nuapada	47	2	

59

12	Boudh	34	1	
TOTAL	12		40	

Parameters for Block selection:

1. General Terrain / physical features of the area: Hilly / Undulating kind of terrain having majority of poorer households,
2. SC&ST population more than 35 % of the total population,
3. More than 75% households are considered as deprived as per SECC data.
4. Around 2000 or more households organized either by OLM or by NGO to form the growth nucleus in the block.
5. Active/ vibrant NGO presence

Since BRLF is supporting the NGO costs in the project, thus based on the above parameters as well as active presence of BRLF's partners in the block following blocks have been selected:

Table 2: Tentative Block list with SC&ST%age , deprived household percentage¹ and OLM's intensive block in different stages

Sl. No.	District	APC block	Rural SC&ST %age	%age of household considered under deprivation (SECC)	Intensive block(Out of 150 block)	Intensive block (Out of 43 blocks)
1	Kandhamal	Phulbanisadar	77	88	Phulbani	
2		Balliguda	69	85	Balliguda	
3		Nuagaon	61	86		
4	Rayagada	Bisamkatak	82	80	Bisamkatak	
5		Kolnara	80	Block level data not available		
6		Muniguda	60	78	Muniguda	
7		K singhpur	81	77	K singhpur	
8	Kalahandi	Lanjigarh	70	86	Lanjigarh	
9		Thuamul Rampur	84	95	Thuamul Rampur	
10		Golamunda	43	93		Golamunda
11	Koraput	Boriguma	68	82	Boriguma	
12		Dasmantpur	69	89		Dasmantpur
13		Semiliguda	62	90	Semiliguda	
14		Pottangi	73	89	Pottangi	
15		Nandpur	69	91		
16		Lamptaput	65	78		Lamptaput

¹ As per Census 2011 and SECC data

17		Boipariguda	73	91	Boipariguda	
18		Kundra	68	86		
19	Keonjhar	Jhumpura	59	78		Jhumpura
20		Patana	60	83	Patana	
21		Banspal	84	Data not available	Banspal	
22		Harichandanpur	64	83	Harichandanpur	
23		KeonjharSadar	60	80		
24	Mayurbhanj	Jashipur	78	85	Jashipur	
25		Karanjia	75	84	Karanjia	
26		Thakurmunda	79	89	Thakurmunda	
27		Khunta	84	87		
28	Bolangir	Belpada	49	90		Belpada
29		Khaprakhol	50	92		Khaprakhol
30		Bangomunda	36	92	Bangomunda	
31		Tureikela	48	93	Tureikela	
32		Murivahal	42	Data not available	Murivahal	
33	Nuapada	Khariar	39	88		Khariar
34		Boden	48	91	Boden	
35	Jharsuguda	Laikera	68	82	Laikera	
36		Kulabira	61	79	Kulabira	
37	Sambalpur	Jamankira	68	84	Jamankira	
38		Kuchinda	66	83	Kuchinda	
39	Dhenkanal	Kankadahad	55	84	Kankadahad	
40	Boudh	Kantamal	39	90	Kantamal	
TOTAL		40			27	7

4. Activities of the Project

4.1. Promoting Agriculture Production Cluster model

4.2. Integrated model of rearing traditional small ruminant and back yard poultry

4.1 Proposed APC Model: A synchronized market linked production system.

"APC model" is based on the hypothesis that the right knowledge, tools, and market ecosystem linkages can recreate synergistic demand and supply conditions in agricultural societies still practicing subsistence agriculture; leading to the creation of thriving agricultural production clusters in a much shorter time frame.

APC² is a self-regulated Farmer Producer organization (FPO) of approximately 3,000-5,000 smallholder farmers in a defined area, who synchronize production of a common basket of commodities to create a marketable surplus and build ecosystem to provide various services

² Synonymous to Producers' company(PC) of OLM

required for the farmers in a sustained manner. Each APC (1-2 blocks) comprises of around 20-25 PGs where coordinated production, primary level value addition and vibrant collectives to manage and avail different services.

Each PG comprises of around 150 farmers across 1-4 contiguous villages that practice synchronized production of 2-3 commodities/crops per season. This decentralized approach to creating PGs significantly reduces institutional management load. It also ensures that smallholder farmers play an active leadership role right from the inception stage ensuring greater accountability and ownership at the community level. Whereas PC/ APC helps in creating mechanisms to provide different support services such as (a) setting up market ecosystem, (b) create / manage irrigation facilities, (c) support small holders to access MSP, Crop Insurance services, (d) access new technologies for production, (e) institutional strengthening of PGs, and (f) support farmers to avail different provisions of the Government.

Key elements of an APC

- 1. Setting up PG in a defined Area
- 2. Strengthening APC/PC and Developing ecosystem at APC level

1. Setting up PGs in a defined Area: Following are the key activities taken up at this level:

- a. **Farmer Collectivization:** Self-regulated collective of around 150 smallholder farmers from 1-4 villages will form Producer group (PG). At this level, the collective will select the crop, crop coverage area and prepare a calendar of activities looking at market and the agro-climatic context. The collectives take responsibility of setting up aggregation mechanisms. PG will help in individual household wise crop planning, set norms to stick to the calendar of activities and ensure the package of practices. Focus would be given to promote collectives of women farmers. The institutional set up will be built on the existing base of the SHG institutions, promoted by different NGOs and Govt.
- b. **Market study of the identified area:** Region wise market study will be conducted with local and regional markets to map month wise crop demand, feeding points, capacity of different markets, existing marketing systems, etc. This will help to come up with list of important crops which has market attractiveness. A system will be developed to generate information on a regular basis.
- c. **Crop Planning:** Farmers prepare cropping calendar for the whole year in a targeted area of around 40- 50 acres of the PG. Important steps in this are as below:

i. Selection of Winner Crops

Commodities /crops are initially selected based on three key factors:

- *Small holder farmer suitability,*

56

- *Agro-ecological compatibility*

- *Market attractiveness of the crops (Unmet need, seasonal deficit for selected crops, sustained demand & relevance, etc.)*

There are already some identified crops which have market demand and horticulture department is also planning to promote those. These crops will also be included while selecting the crop (e.g. Onion, Guava, etc.).

ii. Synchronized production in order to create a marketable surplus. This may include following:

- *Crop sowing or planting at a fixed time looking at the higher probability of getting good price,*

- *Common nursery / nursery by the entrepreneur to ensure synchronized planting,*

- *Market actors reaching to the door step of the farmers,*

iii. Developing aggregation center:

- Depending upon the commodity, aggregation center will be developed for grading, sorting, packaging and temporary storage before transporting. Low cost structure would be created with basic facilities of weighing, packaging, etc. It may also be started in 1 to 3 PGs depending upon their volume and type of commodity.

iv. Focus on sustainable production practices:

- Package of practices will focus on sustainable production measures largely following non pesticide management (NPM) principles. As mostly cash crops will be promoted during off season, community would adopt sustainable practices gradually based on the experiences. Following are tentative measures which will be adopted in the area:

- Preparing and using compost (NADEP, low cost composting, Pranamrit, etc.)
- Preparation and use of organic liquid manure (Jeevamrit, AmrutPani, etc.)
- Mixed cropping will be promoted wherever possible (e.g. Ginger & Pigeon pea)
- Managing pest by applying NPM principles

d. Developing Value Chain Enablers:

Market-focused individuals referred to as an "agri-entrepreneur" (AE) are systematically selected from the local area and groomed to engage with targeted

families for adopting improved practices, help them to get inputs, link them with the market and other actors and help in primary level grading, sorting and packaging. They earn revenue from these services and will be a role model for the youths in the primary sector. There will be around 1 to 2- AEs per PG who would be systematically groomed.

e. Developing critical Infrastructure:

Infrastructure development is an important enabling aspect at various stages of promoting APC; following are the critical infrastructure required for these regions to sustain the APC.

- Irrigation: In the proposed region large no. of people do not have access to irrigation. It is proposed to create around 25 acre of irrigation in each PG to build required level of farming intensity. Depending upon the geophysical situation different types of irrigation structures will be taken up. Under this project following types of irrigation structures would be given priority for bringing more area under irrigation
 - o Installing new community river lift or individual cluster lift points under OLIC and OAIC,
 - o Cluster bore well schemes in the probable areas and
 - o Medium low land /low land dug well along with lifting device.
 - o Reactivating the existing CRLP schemes

- Farm mechanization: In each PG one agro service center will be promoted which will provide different farm mechanization services to these farmers. At the same time farmers individually will also access the provisions from Govt.

2. Developing ecosystem at APC/PC level

To sustain and strengthen the activities at the PG level, it is essential to build ecosystems for sustained quality support services. Building and sustaining relationships with market players are critical to ensure quality supply of inputs to smallholder farmers. It also enables predictability and stability around post-harvest processes and sale of produce.

At the APC level an entity will be promoted to carry out the following:

- a. Support to PGs to carry out the business
- b. Support services for operation and maintenance of irrigation systems
- c. Set systems for coordination amongst the AEs of PGs
- d. Building linkages with market ecosystem; market players will partner with these entities
- e. Help PGs to individually / collectively attain economies of scale
- f. Facilitate multiple value chains
- g. Channelize and organize investments
- h. Planning, review and quality control at all levels

- 54
- i. Facilitate input, insurance, & credit
 - j. Support to channelize Govt. resources

In the blocks where there are existing FPOs, they will develop the mechanisms to play this role. In other blocks primary focus would be given to initiate m-APCs/ PGs and gradually APC/PC will be formed.

Advantages of APC/PC model

- Contextualized for smallholder production systems and more bottom up planning,
- Market-linked approach to improve farmer incomes through synchronized production and marketing without hindrance of high levels of bureaucracy and rigid management structures,
- Revitalize farm economies with active local leadership and engagement of farmers instead of a top-down approach, as evidenced by decentralized decision making around market-linked crop planning,
- Potential to show immediate gains
- Ecosystem approach to build linkages as well as a synergistic and unified approach to leverage government interventions

4.2 Integrated model of rearing small ruminant and back yard poultry (BYP):

Most of the farmers in this region rear Goat and BYP. Both poultry birds and goats have high regeneration potential and thus within a small period of 1-2 years, significant increase in flock/herd size can be attained to earn a substantial income from this intervention if the mass mortality can be checked and some critical improved rearing practices can be ensured. In the absence of control over mass mortality the families lack confidence to make investments to rear the poultry birds or goats at a business scale, and thus leave them to grow on their own at a sub-optimal level. Thus it is planned to take both small ruminants (primarily goat) and indigenous birds (primarily indigenous poultry birds) in an integrated manner with establishment of services to ensure timely vaccination, de-worming and first aid services on a large scale along with ensuring improved rearing practices by women in rural poverty pockets. Critical intervention points are as below: .

- Service system establishment for preventive as well as curative disease control such as vaccination, de-worming, medication etc. by an entrepreneur called Community Animal Health Worker (CAHW).
- Proper night shelter which helps ventilation, reduces disease and for BYP it helps in proper hatching and protection from predation
- Improving local breed of BYP and Goat through proper selection and practices
- Improved rearing practices such as supplementary feeding and care

It is experienced that a sample family can earn around Rs.20, 000 from this intervention over a period of 3 years with the above interventions.

Here also Producers' group of livestock rearing will be promoted as per the OLM guideline.

Annexure-II: Budget:

1. **Institution building , Capacity building and working capital:** It will be mobilized from OLM and will be implemented as per the PG &PC guideline having following major components
 - a. **Cost of promoting and strengthening of PG** (Infrastructure, IB&CB, Working capital): Each m-APC/PG comprises of 20- 150 farmers across 2-4 contiguous villages covering around 40 acres under production cluster. An amount of Rs340000.00 per PG will be allocated as per OLM's PG&PC guideline as mentioned below. As per ATMA norm per farmer per day training cost within district is Rs250.00. It is assumed each farmer will receive at least 2 trainings per year. Thus per farmer cost would be Rs500 and per PG with 150 farmers it would be Rs 75000.00. So the cost norm may be revised to Rs394000 (340000- 21000 +75000).

Cost norm formation of PG (Infrastructure, IB & CB, working capital)							
Sr.	Budget Head	Approved cost norm of OLM			Proposed cost norm		
		Amount in Rupees			Amount in Rupees		
		Yr1	Yr2	Total	Yr1	Yr2	Total
Startup and IB							
1	Inception						
2	Institution Building	72,000.00	36,000.00	1,08,000.00	72,000.00	36,000.00	1,08,000.00
3	Capacity Building	21,000.00		21,000.00	75,000.00		75,000.00
4	Service charge to other institutions/services (if affiliated to PC of hiring professional services)	3,000.00		3,000.00	3,000.00		3,000.00
5	Insurance	8,000.00		8,000.00	8,000.00		8,000.00
Support Fund:							
1	Equipment & Infrastructure & Rent	1,00,000.0		1,00,000.00	1,00,000.00		1,00,000.00

52

2	Working Capital (After 1st Grading Test)	1,00,000.00	Based on Business Plan	1,00,000.00	1,00,000.00	Based on Business Plan	1,00,000.00
3	Working Capital (After 2nd Grading Test)	4,00,000.00		4,00,000.00	4,00,000.00		4,00,000.00
Grand Total		7,04,000.00	36,000.00	7,40,000.00	7,58,000.00	36,000.00	7,94,000.00

N.B: Based on the second grading test (SGT) of the PGs, each qualifying PGs will receive additional working capital of Rs 400000.00 as mentioned above.

- b. **Cost of promoting APC/PC:** Around 3000 to 5000 farmers from around 20 -25 PGs/m APCs will be aggregated to form Producers Company at an appropriate geography in a contiguous manner. An amount of Rs6150000.00 per PC will be allocated as per the following cost norms.

Cost Norm of Producers Company as per OLM						
Sl. No	Activity	No	Unit cost	Month	Total Cost	Remark
1	Producer Profiling, Data base	10000	25		250000	10000 farmers will be tagged
3	Registration of PC, Development of documents, Organizing BOD and AGM, Audit Report and ROC filling for two years	1	100000		100000	
4	Operational cost of PC	1	45000	60	2700000	Will be released in one trench
5	Establishment cost and training to BOD and Exposure visit	1	200000		200000	
6	MIS and Software	1	200000		200000	
7	Specialized training	1	200000		200000	
8	Working Capital	1	2500000		2500000	Based on Business Plan
Total					6150000	

51

N.B.: The amount of Rs61.5 Lakhs has been earmarked considering maximum up to 10000 farmers. However here it is proposed to consider a PC of 3000 to 5000 farmers. The left over funds may be utilized for other purposes as per the need and approval from OLM.

2. **Promotion of Agri-Entrepreneurs:** This may be supported by a special scheme of APICOL for promoting such AEs. Costs of promoting 1000 AEs are mentioned as below.

S.N.	Particulars	Unit	Quantity	Cost(INR)	Amount(INR)
1	Training of AEs (12 trainee days for entrepreneurship, mentoring and interaction with established AEs @Rs5000 per day)	Trainee days	12000	4000	480,00,000
2	Training of AEs (42 trainee days @Rs1200 per day)	Trainee days	42000	1200	504,00,000
3	Incubation cost(Rs5000 per month for 12 month per AE it is Rs. 60000)	AE No.	1000	60000	600,00,000
3	Support for tablet to capture the information. Rs8000 per AE	AE No.	1000	8000	80,00,000
4	AE- Hub Set up (2 person on marketing & Agriculture with a salary of Rs 75000 each and MIS and data manager of Rs50000. Per month it is 2,00,000. Thus per year it is 24 Lakh and in 3 years it is 72 Lakh. With 20% overheads 14.4 Lakh. Total is 86.4 Lakh	No.	1	86,40,000	86,40,000
5	Software development as per the requirement	Lump sum			10,00,000
6	Publishing material, advertising, Training material development, procurement procedure, etc	Lump sum			20,00,000
	Total				17,80,40,000

3. **Convergence from existing schemes as per the department**

- a. **Directorate Agriculture:** (i) Farm mechanisation (ii) Agro service centre (iii) Community river lift (iv) Reactivation of existing CRLP
- b. **Directorate Horticulture :** (i) Sprinkler set, Drip set (ii) Trellis (iii) Nursery poly house (iv) Fruit tree plantation in 8000 acres of land(v) Aggregation and sorting centre (With 70% subsidy)

- c. **OAIC** : (i) Community river Lift point(CRLP) (ii) Individual cluster micro river lift (iii) Individual cluster deep bore well (both electric and solar) (iv)Small water lifting devices
- d. **OLIC** : (i) Community river Lift point(CRLP) (ii) Individual cluster micro river lift (iii) Individual cluster deep bore well (both electric and solar)
- e. **Panchayati Raj and Drinking water Department** : (i) Dug well (ii) Goat shed (iii) BYP shed

Indicative amount for different activities

1. Irrigation	:	Rs. 13120.00 Lakh
2. Farm mechanization	:	Rs. 3000.00 Lakh
3. Fruit tree Plantation	:	Rs. 8000.00 Lakh
4. Aggregation, sorting and packaging centre	:	Rs. 720.00 Lakh
5. Shed construction for Goat & BYP	:	Rs. 4500.00 Lakh
Total	:	Rs. 29340.00 Lakh

The above mentioned amount is an indicative only, however the exact subsidy as applicable will be provided as per the existing guideline

4. Cost of project facilitating team for the promotion of APC organization (NGO)

SI	Particulars	Unit	Qty.	Amount (in Lakh)
1	Cost of Block Level Team @ Rs. 30.00* Lakh / Yr. for 3 Years	Number	1	90
	Total cost for 20 teams			1800
2	Coordination cost of the project , 13% of the above cost			234
	GRAND TOTAL			2034

* Approved cost of Cluster Facilitation Teams (CFT) by MoRD, Gol for MGNREGA Implementation

Abstract of Estimate

SI.No	Particulars	Unit Cost	Qty.	Total Amount	Rs. In Lakh	Source of Funds
01.	Formation of Producer Group	7.94 per PG	650	5161.00		OLM
02	Formation of Producer Company	61.50 per PC	30	1845.00		OLM
03	Promotion of Agri-Entrepreneurs			1780.00		APICOL

04	Convergence from existing schemes for infrastructures	L.S.	LS	29340.00	Respective Department
05	Cost of project facilitating team for the promotion of APC organization (NGO)			2034.00	BRLF and other Donors
Total				40160.00	

(Rupees Four hundred one Crore and Sixty Lakh)

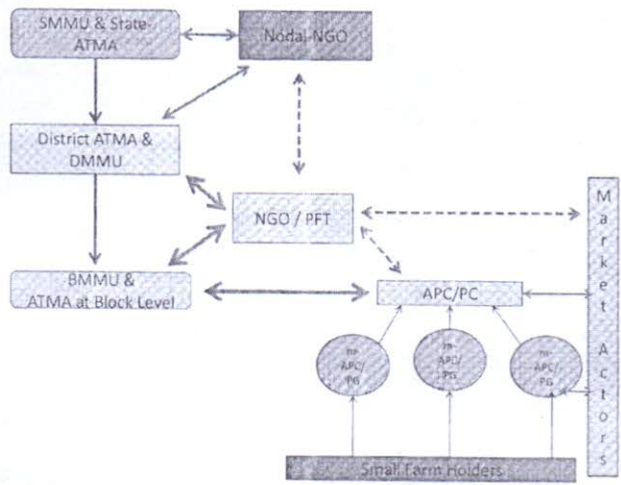
Annexure-III: Institutional, Implementation & Coordination mechanism , Role of different Actors and Result frame

1. Community based institutional mechanisms

As predominantly this project is taken up in the areas where social mobilization has been done in the form of SHGs, farmers group, etc. by OLM and NGOs, therefore focus would be given to build from this existing social mobilization base. There would be a village level body of the farmers taking up agriculture in a production cluster manner. Most of the work related to synchronizing production and ensuring micro practices at the farmer level will be the focus of this village level body. In places, where SHGs are mobilized and Cluster level forum /VO is already promoted by Govt. /NGO, this body will play the above role.

Around 150 members from 2-4 villages will form a Producer group (PG) which will be the general body. General body will meet once in every quarter. There will be a sub-committee of 5-10 members constituted from 2-3 members from each Village at the level of PG. In the places where GPLFs are formed focus would be given to include livelihood committee member in this PG subcommittee. Institutional sustainability will largely depend upon the functioning of these PGs as an vibrant activity group. At the block level one representative from m-APC and Agri-Entrepreneurs will form a body to build ecosystem for these m-APCs. At district and state level network of APCs and Agri- Entrepreneurs will be formed to build larger ecosystem and attract significant actors into the system. Following are the roles of different tiers of institutions:

Figure-3: Implementation Architecture



2. Implementation architecture

46

Directorate of Horticulture, Govt. of Odisha will be the apex body which will look after the administration and funding of the programme. As OLM will provide major programme components for building institution, providing working capital and capacity building of its members, they will work closely with the project. A state programme secretariat will be established who will work with Department of Horticulture and OLM. PRADAN would play the role of nodal NGO to anchor the programme secretariat for the project which will be responsible for supporting department on programme design, management, capacity building, implementation and developing monitoring system for the programme. BRLF will bring in the NGOs in the identified districts by following a Govt approved selection process. NGOs will play the role of Programme Facilitating Team (PFT) to strengthen farmers' organizations and other actors for successful implementation of the programme. They will work closely with OLM and ATMA machinery. At the district level ATMA will be the programme administrative unit. PD, ATMA will be the nodal person for the programme. Programme secretariat in consultation with district ATMA and DPM, OLM will prepare action plan which will be submitted to Directorate Horticulture and Director, OLM for its approval. It will review the project on a quarterly basis. At the block level the unit of ATMA, BMMU of OLM, PFT and PC would work closely.

At different levels there will be coordination committees for effective functioning of the programme; which is explained as below

Table 1: Coordination committees at different levels

Level	Coordination Body	Composition of the Committee	Roles
State	State Coordination Committee	<ul style="list-style-type: none"> • Headed by Principal Secretary, Dept. of Agriculture and Farmers' Empowerment, • Other members include: Director Horticulture, Director OLM ,Director Agriculture, Director ATMA, , Director Soil conservation, MD- OLIC , Director AH&VS , MD OAIC, Nodal NGO. 	<ul style="list-style-type: none"> • Annual Plan Approval and Budget Allocation • Overall coordination • Convergence of schemes from other Dept. • Periodic review and Monitoring, MIS • Issue circulars / Office orders to create enabling conditions
District	District Coordination Committee	<ul style="list-style-type: none"> • District Collector will head the Committee • Other members include: Deputy Director Agriculture/ Deputy Director Horticulture ,EE- OLIC,DPM OLM, 	<ul style="list-style-type: none"> • Finalize Annual Action Plan • Smoothen funds flow • Coordination with various departments • Convergence of schemes in identified

		Concerned Block agriculture officer, Lead District Manager, Chief District Veterinary Officer ,Nodal NGO.	blocks <ul style="list-style-type: none"> • Review of implementation of Irrigation, Horticulture assets • Maintain MIS •Quarterly review and planning meeting
Block	Review and Monitoring Committee	Headed by Block Agriculture / Horticulture Officer Other members include: BTM, ATMA, BMMU, NGO, APC representative	<ul style="list-style-type: none"> • Quarterly planning • Monthly review of implementation • Coordination among stakeholders,

An NGO active in the block will be chosen as Project Facilitating Team (PFT) by BRLF through a Govt. approved selection process. BRLF as a Govt. agency has a well laid out processes for NGO selection. As BRLF is funding the cost of the NGOs, they will run the process and finalize the list of NGOs applying the Govt approved processes. Funding availability for NGO will also be an important criterion for NGO selection. A four party MoU will be signed between Director Horticulture, Director OLM, BRLF and PRADAN. Thus NGOs selected by BRLF will play the role of PFT. PFT will work closely with Farmer producers' organization for project implementation. Initially focus would be given to strengthen PG and PC /APC will be federated and will be legally registered as per their stages of functioning. In the intensive blocks PFT would work with the community Cadres promoted by OLM to take up this activity.

3. Actors and their role

To achieve the objectives; Govt., NGO and other enablers (market players) are proposed to come together. Few selected NGOs who have significant experience around this project will form a consortium to take it forward. At the state level there will be a Secretariat that would orchestrate and support the Govt. in this initiative. The roles of different actors are as below:

Table 2: Role of different actors

APC (Community based organization)	Govt. promoter)	(APC NGO (Facilitator)	Enablers ³
- Crop planning and activity calendar preparation and	- Provide necessary finance to the APCs and its promoters	- Formation and strengthening of PG and APC in the selected blocks,	Market players - Provide information and platform for marketing of the

³Depending upon the domain of services their role would vary

<p>implementation of the plan</p> <ul style="list-style-type: none"> - Building linkages with Govt. and market - Coordinating with AEs and other actors - Setting norms and systems around APC - Inclusion of left out families 	<ul style="list-style-type: none"> - Converge relevant schemes in the identified areas - Reviewing and monitoring - Incorporate changes in policies / programme to favor the access of small holders, - Develop MEL system for the project 	<ul style="list-style-type: none"> - Groom AEs to play their role effectively - Provide timely access to relevant information - Nurture the collectives for crop planning, farmer capacities for adopting modern and sustainable farming in a synchronized manner, - Set up market eco-systems around APCs, - Coordinate with Government and relevant departments for convergence of programme in APCs 	<p>commodity.</p> <ul style="list-style-type: none"> - Influence the production system based on the demand of larger market - Provide relevant technologies / inputs - Partnering with APCs for long term synergistic gains
---	--	---	--

4. Sustainability plan of the programme:

Within 3 years, intensive implementation for creation of different infrastructures, synchronizing the production as per the market and linkage with the market will happen. However, it will take one more year to sustain its' effort and run in a sustainable manner. Following are some of the components which will sustain the initiative after the project period:

- Institutions at different levels are strengthened to play the desired role . Here critical would be the functioning of m-APC/PG which will be the foundation to run in a sustained manner.
- As an approach it is planned to attract market to the door step of the farmers which builds a sustainable linkage.
- Improving knowledge, awareness, skill and access by the farmers will be a key approach at all stages of programme implementation
- APCs would work closely with OLM and ATMA which will build confidence on working together.
- Creation and use of irrigation infrastructure will enhance the cropping pattern and cropping intensity thus impacting whole economy of the area
- Substantial income gain by the farmers from the activity will sustain them in the activity.
- Agri-Entrepreneurs promoted at the PG level, who earn significantly by providing quality services, will continue after a threshold level. Possibility of exploitation by these AEs can be minimized by greater awareness within the community and involvement of Community institutions in the APC promotion.
- Efforts would be made to build an ecosystem to create more interconnectedness and availing services as per the requirement.
- Creating a network of different actors at district and state level will nourish this initiative.

5. Outcomes of the Project:

Table below represents the result frame of the project:

Table 3: Result frame of the project

Objective	Indicators	Outputs	Indicators	Activities
To trigger growth in farm sector with the objective of sustainably double the income of 1- Lakh small and marginal farmers in the backward highland regions of the state, To establish the model of Agriculture production Cluster (APC) in 40 backward blocks of the state, as an effective method to organize production system and services of markets	70% of the families' income doubled	<ul style="list-style-type: none"> - Promotion of Vibrant PGs and APC - Active participation of women in the activity 	<ul style="list-style-type: none"> - 1 Lakh Smallholder farmers mobilized into APC - 60% women become active member in the APC - 650 m-APC and 30 APC/PC formed - 80% of PG meets the Grade-A&B category - Winner crops are selected as per the process 	<ul style="list-style-type: none"> - Identifying PGs and mobilizing farmers to form PGs - Selection of winner Crops based on small holder suitability, market attractiveness and agro ecological suitability - Identifying and grooming of AEs and ensuring quality services - Synchronized production at each PG level in order to create a marketable surplus and market actors reaching to the doorstep - Setting systems and processes at PG level for effective transaction - Developing aggregation center in the PG - Creation of irrigation infrastructure in convergence with relevant departments - Reviving and using the existing irrigation infrastructure - Setting up Agro Service center for mechanization in convergence with
	70% of the APCs are running as per the standard	<ul style="list-style-type: none"> - Crops are identified for developing as a production cluster - AEs providing quality services in the area - Farmers having year-round irrigation of at least 0.3 acres each - Each m-APC could attract the trader to reach the doorstep by synchronizing production - Farmers having access to mechanization tools - Enhancement of Productivity - Adoption of sustainable cultivation practices - Establishment of market chain around the 	<ul style="list-style-type: none"> - 60% of the 750 AEs are providing quality services and earning around Rs60000/- per year - 70% Farmers having year-round irrigation of at least 0.3 acres each - Market actor reaching at the doorstep in 70% of the m-APCs. - Grading / Sorting & Storage is done at the PG level - 60% of farmers with access to mechanization tools - Productivity of the cash crop is doubled - 40% of the farmers have adopted NPM practices 	

44

		identified commodities - Increase in income from Goat and BYP rearing	- 70% of the PG established the market chain - Rs.15000 income from livestock rearing activity with 40% of the families	departments - Developing ecosystem at APC level - Intensifying Goat and BYP rearing - Strengthening partnership between NGO and Govt.
--	--	--	--	--

Year wise milestones/outputs against the key indicators of success (Cumulative from baseline)

Key Indicators	Year-1	Year-2	Year-3	Year-4
Cumulative no. of PGs promoted	400	650	650	650
No. of families covered	40000	70000	100000	100000
No. of PGs meets the set institutional standard (Grading test)	-	400	650	650
Increase in area under production cluster crops	30%	40%	50%	50%
Area under irrigated agriculture (In acre)	2000	8000	16000	16000
No. of farmers having access to mechanization	12000	40000	60000	60000
%age of AEs earning around Rs60000 per year from the business	-	40%	50%	75%
Increase in income (70% of the participating families) of the family	30%	50%	70%	100%

-----o-----