

Guidelines for Implementation of Community Infrastructure & Drudgery Reduction Activities

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Implementation Procedures for Community Infrastructure and Drudgery Reduction Activities:

Eligible Activities for support

1. Community infrastructure facilities that are eligible for construction would include, but not be limited to the following:

I. Drinking water supply and village sanitation

- Gravity Water Supply/Drinking water with solar
- Hand Pumps
- Toilets
- Water Purification Pilot such as Iron/Flouride filters in tube wells

II. Housing and Habitat Development

- Housing Units
- Construction Materials for House Improvement
- CC Road in Villages

III. Roads, Electricity & Solar Lighting

- Connecting Roads/Black topped
- Foot Paths
- Ghat cutting Roads
- Culvert/Cause weir
- Improvement of Road
- Improvement of Foot path
- Drain
- Gaurd wall
- Grid Connection
- Community Solar lighting

IV. Social Infrastructure

- Multi Purpose Community Hall
- Renovation of Multi Purpose Community Hall

V. Economic Infrastructure

- Drying yards
- Market yards
- Aggregation centres
- SHG work sheds

VI. Entrepreneur Development Centre

VII. Household Gas Connection

VIII. Milling units

IX. Model Nursery

X. Livelihood Intervention like Pisciculture, Lac cultivation, Seri culture, Integrated Farming, Duckery etc.

XI. Tribal Culture and Values

- Support to cultural festivals
- Youth dormitory
- Information-cum-Culture centre in Model villages
- Sacred fencing

XII. Policy Initiatives

- Studies and Survey
- Legal Advocacy

Introduction:-

The overall goal of OPELIP is to achieve *enhanced living conditions and reduced poverty* of the target group households. This is sought to be achieved through realizing the development objective of enabling *improved livelihoods and food and nutrition security* for 13 PVTG households, other tribal households, SC households and other poor households, *thus covering all households in the Panchayats in 17 MPAs under 12 districts*. The strategy to be followed is to build the capacity of the target households, secure them their entitlements over land and forests, improve their agricultural practices for higher production, promote income-generating micro-enterprises as alternate livelihoods, ensure access to education, health and other services, improve community infrastructure and reduce drudgery.

The purpose of this Guide line for Community Infrastructure & Drudgery Reduction component is to assist the staff of the Programme Management Units (PMU), Micro Project Agencies (MPA), NGOs and other participating agencies responsible for planning, implementation, supervision and monitoring of work in OPELIP. This guideline contains information about the Programme concept, its design and implementation modalities, which will enhance the overall understanding of the PMUs and the stakeholders. It is also intended to provide guidance with regards to the management of finances, systems of budgeting and accounting and the procurement procedures. In a nutshell, this guideline is the **basic guide to action** with regard to OPELIP for Community Infrastructure (CI) & Drudgery Reduction (DR) component.

Purpose of CI & DR:-

The purpose of the sub-component Community Infrastructure is to ensure secure access for PVTGs to basic services, a healthful living environment and basic communication facilities so that they can engage with fair markets, larger social and political processes and public services and overcome the exclusion they suffer due to physical isolation.

The purpose of the sub-component Drudgery Reduction is to minimise the drudgery and health hazards in women's household work and enhance their overall wellbeing.

Objectives of CI & DR:-

The objective is to ensure access to safe drinking water, sanitation, proper housing and living environment, all weather road connectivity, electricity and home lighting, minimal social services

and economic infrastructure. The drudgery of women can be reduced by reducing their time, labour consumption and increase their efficiency in livelihood activities to enhance their income.

Proposed Activities:-The activities are described in the following.

1. The **Gravity Water Supply project** will be constructed where there is a perennial springs/streams/water courses (surface water) in the up hills by construction of intake structure and conveying through pipe by means of gravity and supply water for irrigation and domestic use/drinking water at HH level. However, in some cases perennial surface water flowing below the village, water will be lifted by electrical/solar/hydro energy through tube well/hand pump to overhead tank and supply to HH by gravity connecting to the tank. **The unit cost of the project is around Rs. 6, 50,000/-.** As per the economic design and distance of the source to village, prevailing head & discharge the amount can be utilised in more than one project.

2. The **hand pumps** with a platform will be constructed, where neither source of surface water is available. The available ground water will be tested for toxicity due to dissolved minerals, especially iron, where hand pumps are being installed. **The unit cost of the project is around Rs. 1,35, 000/-.** The fund may be placed to RWSS to carry out the installation of hand pump along with testing of ground water. MPA if need be, would enter into an agreement with RWSS, District Water and Sanitation Mission for implementing the programme.

RWSS or the District Water and Sanitation Mission staff would:

1. Make site selection in consultation with the community facilitated by the NGO.
2. Tender for and enter into contract with a drilling contractor to undertake the drilling work and installation of the casing;
3. Install the pump and cast the concrete slab;
4. Arrange training for community maintenance teams;
5. provide initial package of spare parts;
6. Hand over the completed work to the community.
7. Procurement of contractors by RWSS mission would follow the normal RWSS procedures, namely, bidding limited to pre-qualified contractors, tendering and award the work to the lowest bidder. **An MOU with the VDC** comprising the terms on which the completed work is handed over to the village would be made. The MOU will comprise an agreement by the VDC to take responsibility for maintenance and to identify persons from the community for training. The NGOs would be responsible for facilitating the VDCs in the matter.
8. Supervising the work of the contractors would be undertaken in accordance with the normal practice by RWSS Block staff. Materials would be tested at the RWSS district-level office. MPA would retain responsibility for all technical aspects and for ensuring that the works were constructed in accordance with the specifications.

3. Households that do not presently have **toilets** will be provided toilet and bathroom units. These units will be tagged with either gravity water supply/solar based drinking water supply or hand pump operated through solar/electrical/manual through construction of over head storage tank at village level. The household would be expected to contribute construction material such as stone and sand and labour for earth. **The unit cost per toilet is around Rs. 12,000/-.** These toilets

should be planned in the **model villages on priority basis**, where toilets have not been constructed. **The fund may be placed to RWSS to carry out the same by VDC.**

4. **Water Purification Units** will be installed where there is toxicity in surface or ground water due to **dissolved minerals, turbidity, pathogens, excess of Iron and fluoride**. The water sample should be collected and tested so that physical, chemical and biological parameters can be known and the filtration unit can be installed **referring to the testing report** to provide safe drinking water. The unit cost per Fluoride filtration unit in the existing tube well is around Rs. 1,50,000/-.

Selection criteria for drinking water supply: - The following criteria should be taken in to concern before assessment.

1. Small hamlets with poor access to clean drinking water which are unlikely to be serviced under other schemes;
2. Villages where there are **presently more than 150 persons per hand pump** or the hand pumps are not serviceable;
3. The community ensures physical and financial participation in maintenance costs

SL NO	No. of HH	Tentative Population in a HH	Total Population	Total Water Requirement per day per capita (lt.)	Total Water requirement per day for 40HH(lt.)	Total discharge of the surface/ground water source to meet the demand of 40HH per second(lt./sec or lps)
1	40	5	200	40	8000	0.09

Hence, the perennial source or ground water yield having a discharge of 0.09 lps (around 0.1 lps) can be planned for 40HH for drinking water supply project.

5. **Housing Unit & Construction material for house improvement:-**

Housing units and construction material for house improvement, such as roofing and flooring, will be provided on the following criteria:

1. Households not served under existing government programmes like Indira Awas Yojana, Pradhan Mantri Awas Yojana and Mo Kudiyaa.
2. Among the above, woman headed households and households granted homestead sites
3. Remote villages, least likely to have been served under existing government programmes would be given priority.

The FNGO CRPs will collect the information with the help of VDC, fill up the requisite forms to be submitted to avail housing schemes for the left out persons under IAY, PMAY, Biju Panchayat Yojana and Mo Kudiyaa Yojana schemes.

6. **CC Road:-**

Intra village or a portion of road connecting to village road or regularly washed road by heavy rain, are planned under CC road. In this intervention, it will be ensured that CC roads

within the settlement, inside the village will be constructed. In steep terrains where road construction is difficult, cement pathways with proper drainage will be constructed so that motor cycles/cycles may be used to reach to the village. **The cost of CC Road is around Rs. 40,00,000/- per Km. distance.** The tentative dimension of CC Road indicating unit cost is **1000 m(Length) x3m(Width) x 0.15m(Thickness).** However, it may vary as per area specific condition.

7. Roads:- The major types of interventions can be taken under this head may be like Connecting Road, Foot path, Improvement of Foot path, Improvement of Road, Ghat cutting road, Culvert/Cause way, guard wall and drain.

1. Connecting Road/Back topped:-The programme villages **nearer to the state high ways or connecting road to the state high ways** will be connected through all weather condition roads for better accessibility to bigger market, education and health centre. These connecting road which will not be covered under other schemes like Pradhan Mantree Gramya Sadak Yojana (PMGSY), NREGS, BRGF, RIDF etc for some considerable time. The unit cost of this intervention is **Rs.40,00, 000/- per Km. distance.**The priority will be given for convergence of connecting road, foot path to cover under the above mentioned schemes.
2. Foot Path/Improvement of Foot path/Improvement of Road:-Remote villages and hamlets, where road construction is not possible due to **steep slope and undulating topography, forest fringes are covered under this intervention.** In this intervention, the foot path will be created, upgraded so that community can access to the main road by path or by cycle .The access to clinics, schools and marketing will be improvised by constructing these foot paths with minimal environmental impact.

Sl.No.	Activity	Unit	Unit Cost(Rs.)
1	Foot Path	Km.	7,00,000/-
2	Improvement of Foot path	Km.	30,000/-
3	Improvement of Road	Km.	1,40,000/-

N.B: The tentative unit cost is given in the above table. It may slightly vary as per field situation, composition of work and lead factor come in to play.

3. Ghat cutting road:-The ghat road/hilly road are located in the terrain having **cross steep slope 25% or more** .In this case, the major problems are stability, landslides, drainage of great numbers of water course, soil erosion and sharp curvature. The objectives of construction of ghat cutting roads are to shorten the route which gives you safety and low maintenance. The importance of ghat cutting road are economic & industrial development along with preservation of forest wealth along with development of eco tourism spots. The unit cost of small curvature ghat cutting road is **Rs. 3, 00,000/- per Km distance.**
4. In steep terrains where road construction is difficult, cement pathways with proper drainage like causeway/culvert, Guard walls and drains will be constructed so that motor cycles/cycles may be used to reach to the village. The guard walls may also be constructed to prevent the villages nearer to the hills from flash flood during heavy rainfall. The drains

may be constructed inside the village aside of concrete/paucca road or nearby guard wall or ghat cutting road to surpass the excess water and dispose in the safe area in lower gradient.

5. **The unit cost of the masonry guard wall is Rs.2, 10,000/-** with a tentative dimension of super structure around **55m (Length) x 0.60m(Width)x 0.75m(Height)**.
6. **The unit cost of the masonry drain is Rs. 2880/-** per Rmt. with a tentative dimension around **75m(Length) x 0.9m(Width) x 0.5m(Height)**. It may vary as per field situation.

8. Multi Purpose Community Hall/Renovation of Multi Purpose Community Hall:-

1. This activity is proposed in remote PVTG villages without Anganwadi centre or primary school or any building where in house meetings/trainings can be conducted. This type of multipurpose community hall can be utilised for meeting/training of VDC, SHG or other viable institutions prevail in the village. It can be utilised for storage goddons for materials/goods during rainy season. In some PVTG community, the House hold size is very small. During festival time, this hall can be utilised for stay of their guest come from different villages. In some PVTG community(Juang), there is a culture that the bachelor boys are not allowed to stay in the house in the night hours. Hence, the unmarried youth can stay in this Multi purpose community hall and make the mantainenance.
2. The unit cost of Multipurpose community hall including portico/varranda with electrification & sanitary items is **Rs. 8,00,000/- having a construction plinth area around 52 sqm.**
3. In the renovation of Multipurpose community hall intervention, the repair work like **flooring, plastering, roofing, colouring, replacement of doors/windows, provision of ventilation, electrification & sanitation and extension of existing hall** will be considered. The unit cost of renovation of Multipurpose community hall is **Rs. 2,00,000/-**. This amount is considered basing on the estimation of repair work done by FNGO JE and verification of MPA JE.
4. PMU from technical wing will monitor and give guidance as and when required.

9. Drying Yard, SHG Work shed, Market Yard :-

1. **Drying Yard:** This activity is taken for drying & cleaning cereals, pulses, oil seeds and NTFP produces to reduce the moisture content and increase the dry weight for enhancing the price of produces harvested or collected.
2. The unit cost of drying yard is Rs. 3,00,000/- having dimension of the super structure around 15mt.(Length)x15mt.(Breadth) x0.45mt.(Height).
3. **SHG Work shed:-**This intervention is done for SHG or User Groups to conduct their regular basis meeting, training and activity oriented programmes like installation of mills/expeller units, making of badi, in scent sticks (agarbati), pickles etc. This infrastructure will be owned and managed by the community or by a SHG or User Group. One of our objectives is to cover all HHs under SHG groups; hence this infrastructure is very useful.
4. The unit cost of SHG work shed is Rs. 3, 00,000/- having tentative dimension of the super structure around 40 Sqmt. with roofing of AC sheet.

Implementation steps:-The following process will be adopted for construction of Gravity water supply, Concrete road, Foot path, up gradation of road, culvert/cause weir, masonry guard wall, drain, Multipurpose community hall(new & renovation), Drying Yard and SHG Work shed.

1. Request should be received from the community through its VDA and VDC for construction of required infrastructure.
2. The community would be encouraged to form Common Interest Group (CIG) under VDA who will do the execution. The VDA would sign an agreement with MPA to take full or partial responsibility (as appropriate) for all operation and maintenance, indicating the mechanisms agreed with the entire community for the provision of labour and materials if any. Respective VDA is responsible for O&M of the infrastructure.
3. The funds will be placed at VDC and the operation unit is VDC.
4. The FNGO JE along with VDC will do the site selection & feasibility study of planned projects. Example: In case of road, it will serve accessibility to more than one villages, market, school & clinics, cover maximum nos. Of HHs and not passing through protected area implicating minimum environmental impact.
5. The FNGO JE would prepare the design, drawings and bills of quantities, with design features in consultation with the community and submit the estimate at MPA level for technical sanction & approval.
6. Team leader of FNGOs shall submit the requisition for case records along with two copies of the estimates to MPA for Technical Sanction and administrative approval. The concerned Expert of MPA/JE/AE will examine it against the AWPB. After the technical sanction, it should be placed for administrative approval of SO, MPA. After which MIS Assistant (DEO) will issue the case records against original approved copy of the estimate observing the existing procedures.
7. MIS Assistant (DEO) of MPA should keep track of issuing each case record against a particular activity maintaining a case record issue register.
8. The technical approval is obtained from EE or AE/JE of MPA and the administrative approval is obtained from SO/PA,ITDA/Sub collector/Collector depending on the estimated value of work .Then Programme will be passed on to VDC as per the existing norms pertaining to ST & Sc Development Department.
9. After the approval, VDC will procure the necessary construction material through direct purchase/contracting up to Rs. 15,000.00. The local shopping method with three party quotations will be adopted for amount more than Rs. 15,000 and up to Rs. 5.00 lakhs. The necessary resolution should be made by VDC in this regard.
10. For construction of works above 5 lakhs MPA/ITDA will float tender for the same work as per Govt. of Odisha Guidelines.
11. The VDC will form a Community Procurement Committee (CPC) consisting of Secretary, member of active SHG in the VDC, another member of VDC, FNGO representative and MPA representative, preferably JE/AE(Govt. Officials) designated by Special officer of MPA. The committee members may change on rotational basis in every six months except Secretary.

12. The CPC will survey and collect 3 quotations from the market for the construction material /pipes/machineries/ products/items, as decided in the VDA General Meeting.
13. The comparison of 3 quotations will be done and the supplier with the lowest quote would be selected .In case the supplier quoting the lowest is not selected the CPC shall put forth the reason for the same. All the process should be documented in the procurement register.
14. Preference should be given for purchase of construction or other materials from govt. sources/agencies approved by district/state, if available.
15. The MPA Officer would supervise the work progress under the guidance of AE. Government standard rates would be applicable for procurement of materials and wage payment.Both male and female labours will be paid wages equally.
16. Community take effort to undertake labour-intensive earthworks, culvert casting, pipe installation, turfing, etc.
17. The FNGO Engineer would be responsible for liaison with the VDC, for supervision of construction. He will write the measurement books for each completed work and maintain the case record and submit at MPA level.
18. The MPA level, Junior Engineer will be responsible to ensure the procurement of quality materials, complete the activities timely, do check measurement and keep the case records.
19. A schedule of release of funds to the community for the activity will be decided by the VDC and the group during the approval of the activity. The instalments would be released to the group based on the progress of work and expenditure incurred. The further demand by the group can only be acknowledged, when the expenditure of previous release is at least 75% and commensurate with the physical progress.
20. The VDC will be responsible for organizing the labourers from the community who will participate as work force in the activity.
21. Following completion of the works, the project would be handed over to the VDC for O&M.
22. In case of Drinking water supply projects, water user fee will be collected & deposited as VDF. After the completion of work, post project management (O & M) will be done.
23. PMU from technical wing will monitor and give guidance as and when required.
24. In case, any activity does not find place in the AWPB of concerned VDC and needs to be executed as per the necessity and demand of communities, photocopy of the necessary resolution of the VDC justifying the necessity of the work should be submitted by the FNGO along with the estimates of the said work for scrutiny and approval at MPA/PMU level.
25. FNGO shall be held responsible and accountable for initiation of works before issuance of the case records by MPA. FNGO should keep the approved estimates in the concerned case records and also maintain two copies of duplicate case records of all the works undertaken/ongoing at their offices as well as VDC office which shall also be verified during the field visit of staff of MPA and PMU

10. Market Yard, Aggregation Centre and Youth dormitory:-

Market Yard:-Market yards are planned to construct at a site central to all villages in the Panchayat and also better connected with the outside world. Market yards will be constructed in village clusters to facilitate buyer-seller meets. The market yards are

proposed for weekly hat or daily hat to sell out the produces (Land/Forest) in that cluster of villages.

The unit cost of Market yard is Rs. 5,00,000/- .In this type of structure, the Market pindi will be constructed with a tentative dimension of 11mt.(Length)x6mt.(Breadth). The Roof of this structure is plane/colour coated TATA blues cope sheet supported with Truss. The top of the roof is around 4mt. from the floor base and the slanting height of the roof is 3mt. from floor base.

Aggregation Centre:- Theses are planned to collect the land or forest based produce for collective marketing purpose. In a cluster of PVTG villages, these aggregation centres will be focal point to attract outside buyer, who will purchase in lot and pay in cash.

The unit cost of Aggregation centre is Rs. 4,00,000/- having tentative dimension of the super structure around 8mt.(Length)x6mt.(Breadth) with 6 nos. Of RCC columns (0.30 mt. each).The Roof of this structure is plane/colour coated TATA blues cope sheet supported with Truss. The top of the roof is around 4mt. from the floor base and the slanting height of the roof is 3mt. from floor base.

Youth Dormitory:- This activity has been planned in 17 MPAs so that the youth in PVTG area can avail a facility to reside during the skill up gradation training and to stay whenever they have to go outside MPA area for any programme activity and unable to get back their villages. It can be constructed at cluster or MPA level.

The implementation of these interventions like Market Yard, Aggregation Centre and Youth dormitory will be carried by MPA. The MPA JE would prepare the design, drawings and bills of quantities, with design features in consultation with the community. The technical approval is obtained from the Assistant Engineer AE/EE based on the estimated value of each work. The work will be executed by the MPA either through engagement of VDC or Contractor or Departmentally.

PMU from technical wing will monitor and give guidance as and when required.

11. Power Tiller/Agro Service Centre:-

1. Now use of animal power in agriculture is reducing day-by-day and Farm mechanization is call of the day. Agricultural Machineries are key for increasing production & productivity of land & cropping intensity, return & profitability to the farmer and comfort & safety by timeliness of operation, saving labour requirement and reduction in human drudgery.
2. This intervention has been planned to introduce improve farm mechanisation practices so that the time , labour & money used from sowing/transplanting to harvesting will be saved and they will invest the same for any other activities to improve their socio-economic condition.
3. The Agro Service Centre will be promoted at Gram Pachayat level and It will be maintained by any Producer Group or SHG or CSP. In this Agro service centre farm machineries like Power tiller, Nine Tyne cultivator, Puddler, sprayer, weeder, Chaff cutter, Winnowing, Pump etc. will be kept. These machineries will be brought with subsidised price from Agriculture office. These machineries will be used on custom hiring basis for fellow farmers to generate corpus and bring additional equipments which will be helpful for other seasonal crops grown in the area. The unit cost for each Agro service centre is Rs. 3, 00,000/-.

12. Milling Units:-

The villagers generally produce different crops like cereal, pulse, oilseed, spices & commercial crops in cluster or collect available NTFP in different season for their livelihood. Due to lack of value addition and proper market linkage, the community have to face distress selling to intermediate vendors. Hence, the benefit is marginal and community needs milling units to ensure high income.

This intervention of milling unit has been planned to establish in programme GP area as an income generating activity and to be managed by SHG or VDC. These mills can be operated by electrical/Hydro/Solar energy and able to meet the need of the community at cluster level. The major objective of these milling units are to process the raw produce available in the production cluster and add value the processed produce like sorting, grading, packaging and branding etc. After this, the marketing of the branding produce in the local market or weekly hat or bigger market terminals or buy back companies to ensure income of Groups or VDC and reduce their drudgery. The following milling units may be installed based on different type of produce below.

Sl. No.	NTFP produce based milling units	Cereal produce based milling units	Pulse produce based milling units	Oilseed produce based milling units	Spices produce based milling units	Commercial crop/Other produce based milling units
1	Tamarind Deseeding	Ragi Processing unit & Biscuit making	Dal Processing	Oil Extraction Unit(Niger/ Mustard/Sun flower)	Ginger Slicing	Lemon Grass oil extraction
	Press Leaflet making	Rice processing unit/Sheller/ Sheller-cum-Huller			Turmeric processing	Pine Apple processing
	Hill Broom binding	Puffed Rice Mills				Mango Processing(Amchor)
	Bee Keeping	Maize Threshing				Tal Jaggery Unit
	Wild honey collection unit/equipment					
	Lac Cultivation					

Bamboo craft Unit						
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Implementation steps for milling units:-

1. Request should be received from the Group of farmers through its VDA and VDC for Installation of requisite milling unit depending up on their cluster production or collection.
2. The community would be encouraged to form Common Interest Group (CIG) under VDA who will do the execution. The VDA would sign an agreement with MPA to take full or partial responsibility (as appropriate) for all operation and maintenance, indicating the mechanisms agreed with the entire community for the provision of labour and materials if any. Respective VDA is responsible for O&M of the milling units.
3. The funds will be placed at VDC.
4. The Milling unit will be placed at cluster level or G.P level.
5. The FNGO Livelihood & Rural finance officer, NRM-cum-Agriculture, JE along with VDC will do the site selection & feasibility study of planned projects. The pre assessment of unutilised multipurpose community halls will be done to install the milling unit.
6. The Livelihood & Rural finance officer, NRM-cum-Agriculture of FNGO will assess the production potential, output, marketable produce and the required time to get processed product with introduction milling unit, benefit; cost ratio, market study and economics. Referring to the input given by experts, FNGO JE/ Livelihood & Rural finance officer would prepare the tentative estimate or Business Development Plan (BDP) in consultation with the community and submit it at MPA level for technical sanction & approval.
7. The technical approval is obtained from DIC Manager/ Competent authority at ORMAS , EE or AE/JE, and JAO of MPA depending on the estimated value of milling unit and pass on the Programme to VDC as per the existing norms for cost of Project.
8. After the approval, VDC will procure the necessary construction material through direct purchase/contracting up to Rs. 15,000.00. Local shopping method with three party quotations will be adopted for amount more than Rs. 15,000 and up to Rs. 5.00 lakhs necessary machineries for milling units as per GoO guidelines. Necessary resolution should be made by VDC in this regard.
9. For necessary machineries of milling units above 5 lakhs MPA/ITDA will float tender for the same work as per Govt. of Odisha Guidelines.
10. The VDC will form a Community Procurement Committee (CPC) consisting of Secretary, member of active SHG in the VDC, another member of VDC, FNGO representative and MPA representative designated by Special officer of MPA. The committee members may change on rotational basis in every six months except Secretary.
11. The CPC will survey and collect 3 quotations from the market for the machineries products/items required for milling unit, as decided in the VDA General Meeting.
12. The comparison of 3 quotations will be done and the supplier with the lowest quote would be selected .In case the supplier quoting the lowest is not selected the CPC shall put forth the reason for the same. All the process should be documented in the procurement register.

13. After finalisation by the CPC of VDC, the procurement committee of MPA will verify, ensure the quality, brand and technical specifications of the machineries for milling unit and approve it.
14. The FNGO would supervise the work progress under the guidance of MPA Officer.
15. The FNGO Livelihood & Rural Finance officer will be responsible for liaison with the VDC and FNGO JE will supervise the installation. He will write the measurement books for each completed work and maintain the case record and submit at MPA level.
16. The MPA level, Project Manager will be responsible to ensure the procurement of quality materials, complete the activities timely and keep the case records.
17. A schedule of release of funds to the community for the activity will be decided by the VDC and the group during the approval of the activity. The instalments would be released to the group based on the progress of work and expenditure incurred. The further demand by the group can only be acknowledged, when the expenditure of previous release is at least 75% and commensurate with the physical progress.
18. The VDC will be responsible for organizing the labourers from the community who will participate as work force in the activity.
19. Following completion of the works, the project would be handed over to the VDC for O&M.
20. The thematic expert from PMU will monitor and give guidance as and when required.
21. In case, any activity does not find place in the AWPB of concerned VDC and needs to be executed as per the necessity and demand of communities, photocopy of the necessary resolution of the VDC justifying the necessity of the work should be submitted by the FNGO along with the estimates of the said work for scrutiny and approval at MPA/PMU level.
22. Team leader of FNGOs shall submit the requisition for case records along with two copies of the estimates to MPA for Technical Sanction and administrative approval. Concerned Expert of MPA will examine it against the AWPB. After the technical sanction, it should be placed for administrative approval of SO, MPA. After which MIS Assistant (DEO) will issue the case records and the original copy of the estimate observing the existing procedures.
23. MIS Assistant (DEO) of MPA should keep track of issuing each case record against a particular activity by way of maintaining a case record issue register, if it is not being maintained presently.
24. FNGO shall be held responsible and accountable for initiation of works before issuance of the case records by MPA. FNGO should keep the approved estimates in the concerned case records and also maintain two copies of duplicate case records of all the works undertaken/ongoing at their offices as well as VDC office which shall also be verified during the field visit of staff of MPA and PMU.

Tentative estimation of Bamboo craft unit:-

A sample for Business Development Plan (BDP) of Bamboo craft unit has been given below for illustration, which has to be prepared by FNGO livelihood-cum-Finance officer and NRM-Cum-Agriculture officer and prepare the estimate.

BDP/Estimate for Bamboo craft

Activities/Particulars	Project
A. Fixed Cost	Amount in Rs
Storage cum workshop	15000.00
Total	15000.00
B. Working capital	
Raw materials(Bamboo)	35000.00
Total	35000.00
G.Total(A+B)	50000.00

13. Livelihood Interventions addressing drudgery reduction:-

Some of the livelihood initiatives like Model Nursery, Pisciculture, Lac cultivation, Sericulture, Integrated farming and duck rearing activities have been proposed to enhance the income level of groups and reduce the drudgery. The sample tentative BDPs have been proposed below for reference.

Duck Rearing Units:

1. One SHG group comprising of 10 members will be given 130 nos. Of ducks. Each member of SHG will establish a house of 39-40 sft in her back yard to rear 13 nos. adult ducks for egg production.
2. Water tub will be used for regular cleaning of beak and eyes of duck.
3. Khaki Campbell, Indian runner breed will be reared by farmers.
4. Duck rearing and vaccination training will be conducted prior to support to the group.
5. The concerned Live stock Inspector (LI) will be monitoring the unit and provide vaccine as per need.
6. A suitable tank or pond nearer to the village will be useful for their day to day activity.
7. Duck will be reared for 2-3 years and one duck will give 200-250 nos of eggs per year. The below mentioned tentative BDP will be given for a SHG group.

TABLE: INVESTMENT FOR DUCK FARMING (130 NOS OF DUCK)

SI No	Particulars	Description	Unit	Rate/unit	Amount (Rs.)
A	Fixed Cost				
I	Housing	390 sqft	Sqft	90	35100
II	Equipments	feeder, drinker etc	Nos.	40	13000
B	Sub total				48100
C	Working capital				

I	Duck	Indian runner, 130 nos, 16 weeks old	Nos.	250	32500
II	Feed	10 kg/duck/year for 130 duck, 1300 kg @ Rs.12/kg	Kg	12	15600
III	Medicine	medicine & vaccine	LS	LS	3050
IV	Others	litter, lime etc	LS	LS	650
D	Sub total				51900
E	Total cost	B + D			100000

TABLE: INCOME FROM DUCK FARMING

SI NO	PARTICULARS	DESCRIPTION	UNIT	RATE/ UNIT	AMOUNT (Rs.)
A	Egg sales	28600 Nos. Eggs from 130 nos. Ducks(220 eggs per duck per year @ Rs.5/egg).After consumption or damage, 28000 Nos. Eggs will be marketable	NOS	5	1,40,000
B	Duck sales	123 nos @ Rs.150/pcs, 5 % MORTALITY	NOS	150	18,450
C	Total amount of sales				1,58,450
D	Cost of sales				
1	Duck		130	250	32500
2	Feed	10 kg/duck/year for 20 duck, 200 kg @ Rs.12/kg	Kg.	12	15600
3	Medicine		LS	LS	3050
4	Others	litter, lime etc	LS	LS	650
E	Total cost				51,800
F	Profit per year	C - E			1,06,650

A group will be having a net benefit of Rs. 1,06,650/- and it will be a viable option for drudgery reduction for pro poor landless groups.

LAC Cultivation: Lac cultivation is a traditional occupation and important source of income for Tribal families. The Production of Lac in odisha constitutes 2.11% of total production of whole Lac in India. The focal districts identified suitable for Lac cultivation are Sundargarh, kalahandi,& Balangir. It can be used as an alternative livelihood option for tribal family, mostly dependent on the forest.

Steps to be taken:-

1. Horticulture plant like Flemenzia Semilada needs to be popularized along with local plants like kusum, Beer & Pulash.
2. It requires 12 family labour per tree with use of 12 kg Brood –Lac.
3. Initial level training is required for Lac cultivation.

Cost of Cultivation of Lac

Cost of Cultivation		
Sl.no.	Input utilization	(Rs./Tree)
I	Operational cost	5400
1.	Total human labour	1800
2	Brood lac	3600
II	Material Cost	7113
1	Dauli	150
2	Secatear	300
3	Synthetic bag	60
4	Bucket	150
5	Rocking Sprayer	6000
6	Scrapping Knife	100
7	Bamboo bucket	100
8	Pesticide/fungicide	253
III.	Depreciation of fixed capital	238.41
IV.	Total expenses	12751.41

Return from Lac cultivation

Return from lac cultivation			(Rs./TREE)
Sl.No.	Details		value
I	Gross return		25600
II	Total Cost		
	1.Operational Cost	5770	
	2.Material Cost	7113	
	3.Depreciation	238.41	
III	Net profit from per tree		12848.59
IV	Input output ratio		1:2
V	Net profit/income per farm(13 trees)		167031.67
VI	Production	13 trees X 6.15 Kg/tree	80 KG
VII	Income generate in Rs. per day		35.20

In a farm comprising 13 trees will produce around 80 Kg. Per annum amounting Rs. 167031.67 profit. Hence, this intervention may be promoted where nonfarm activities are very less and the livelihoods of the villagers mainly depend on forest produce.

Sericulture:-

1. It is one of the important agro industry based intervention which plays an important role in farm economy. It depends up on the mulberry area, cocoon production and marketing of quality cocoon for silk. It is a occupation of low investment and high out put; source of income and employment. Besides, it is suitable for small and marginal farmers because the cost-benefit ratio is high, low gestation period and ready market is available for the product.
2. The major constraints of this intervention are shortage of irrigation water, persistence of high temperature may affect silk worm rearing in summer and market fluctuation in cocoon marketing.
3. Farmers have more than 2 acres of farm size under mulberry having 4 crops/annum realized maximum profit. Average production of Cocoon is 300 Qntls/Acre@ Rs. 1200/Qntl including transportation and other cost.
4. Tentative economics of Sericulture is mentioned below

BDP/Estimate for Sericulture	
Activities/Particulars	Project
	Amount in Rs
A. Cost of cultivation of Mulberry per 1 Acre	13,000.00
B. Cost of cultivation for silk worm rearing per 1 Acre	24,500.00
Total	37,500.00
C. Return/Income per Acre per rearing	44,000.00
D. Net Income/Benefit per Acre per rearing =C-(A+B)	6500.00
Net Income/Benefit per Acre for 4 nos. rearing	26,000.00
Cost Benefit Ratio	1: 1.44

Integrated Farming System (IFS) as Demonstration Units:- This intervention is a combination of agricultural activities in a unit area of land which aims at maximising return, maintaining soil status & fertility, utilising the by products of one component of farming system as an input in other for ensuring supplementary & complementary enterprise relationship and reducing environmental pollution.

Pre requisites:-

- 1.The selected farmer should have a farm pond of the size 40 m x 50 m x 1.5m.
2. The selected farmer should have at least 2 Acre of land ad joining to the farm pond.
- 3.The farm pond and adjoining land should be close to home stead land as far as possible for better Watch & Ward. If suitable land is not found , farmer must be willing to engage Watch & Ward.

APPROXIMATE COST STRUCTURE FOR DEVELOPMENT OF INTEGRATED FARMING SYSTEM

Sl.no	Components	Total cost in Rs.(approximate)	Finance Assistance from Project in Rs.	Farmers Contribution in Rs.
1	Pisciculture in the farm pond(40m x 50 mx 1.5m)	15000	10000	5000
2	Duckery (Khaki Campell birds-100 nos.)	5000	4000	1000
3	Poultry- 50 nos. Colour birds and 20 nos. desi birds with living spaces	3000	3000	0
4	Cost of cross breed cattle/ Improved milched cow (2 nos.)	32000	28000	4000
5	Apiculture(2 nos.)	7000	7000	0
6	Vermi compost(2 nos.)	10000	6000	4000
7	Land Development work	30000	10000	20000
8	Boundary Plantation(Custard applie/Acacia Manginum/Subabool)	10000	4000	6000
9	Fruits plants on farm pond bund (Papaya, Drumstick,Banana-Bantal Variety and other areas(Pome granate-5 to 7 nos., Guava-2 to3 nos. and Lemon- 5 to 7 nos.)	3000	3000	0
10	Vegetable Cultivation in Rabi(0.25 acre) and Vegetable Cultivation in Kharif (0.5 acre)	15000	10000	5000
11	Rice Cultivation in Kharif(0.5 acre)	5000	2000	3000
12	Maize cultivation in Kharif(0.5 acre)	4000	2000	2000
13	Pulses and Oilseeds in Rabi(1.25 acre)	13000	7000	6000
14	Green fodder culture in Kharif & Rabi(0.5 acre)	6000	4000	2000
	Total	158000	100000	58000

Implementation Steps for Livelihood Intervention:-

1. Request should be received from the Group of farmers/Individual farmers through its VDA and VDC for development of any livelihood intervention under drudgery reduction items depending up on their cluster production or collection.
2. The community would be encouraged to form Common Interest Group (CIG) under VDA who will do the execution. The VDA would sign an agreement with MPA to take full or partial responsibility (as appropriate) for all operation and maintenance, indicating the mechanisms agreed with the entire community for the provision of labour and materials if any. Respective VDA is responsible for O&M of this intervention.
3. The funds will be placed at MPA/VDC and these livelihood interventions will be done at village level.
4. The FNGO NRM-cum-Agriculture officer, VAW along with VDC will do the site selection & feasibility study of planned projects.
5. The NRM-cum-Agriculture of FNGO will assess cost of cultivation, Income, benefit; cost ratio, available market and prepare the tentative estimate or Business

Development Plan(BDP)in consultation with the community and submit it at MPA level for technical sanction & approval.

6. The technical sanction is obtained from DAO/DDH/AAO/DHO/JAO and administrative approval from SO/PA,ITDA /Sub Collector/Collector at district level depending on the estimated value of livelihood intervention and pass on the Programme to VDC as per the existing norms for cost of Project.
7. After the approval, VDC will procure the necessary construction material through direct purchase/contracting up to Rs. 15,000.00. Local shopping method with three party quotations will be adopted for amount more than Rs. 15,000 and up to Rs. 5.00 lakhs necessary requirements as per GoO guidelines. Necessary resolution should be made by VDC in this regard.
8. For necessary of livelihood intervention above 5 lakhs, MPA/ITDA will float tender for the same work as per Govt. of Odisha Guidelines.
9. The VDC will form a Community Procurement Committee (CPC) consisting of Secretary, member of active SHG in the VDC, another member of VDC, FNGO representative and MPA representative designated by Special officer of MPA. The committee members will change on rotational basis in every six months except Secretary.
10. The CPC will survey and collect 3 quotations from the market for the input/items required for the intervention, as decided in the VDA General Meeting.
11. The comparison of 3 quotations will be done and the supplier with the lowest quote would be selected .In case the supplier quoting the lowest is not selected the CPC shall put forth the reason for the same. All the process should be documented in the procurement register.
12. After finalisation by the CPC of VDC, the procurement committee of MPA will verify, ensure the quality, company and technical specifications of input to be procured and approve it.
13. The preference may be given to Government recommended/ Empanelled dealers or Firms for procurement.
14. The FNGO will supervise the work progress under the guidance of MPA Officer.
15. The FNGO VAW will be responsible for liaison with the VDC and FNGO NRM-cum-Agriculture officer will supervise. He will keep a track of each completed work and maintain the case record and submit at MPA level.
16. The MPA level, JAO will be responsible to ensure the procurement of quality materials, complete the activities timely and keep the case records.
17. A schedule of release of funds to the community for the activity will be decided by the VDC and the group during the approval of the activity. The instalments would be released to the group based on the progress of work and expenditure incurred. The further demand by the group can only be acknowledged, when the expenditure of previous release is at least 75% and commensurate with the physical progress.
18. The VDC will be responsible for organizing the labourers from the community who will participate as work force in the activity..

19. The thematic expert from PMU will monitor and give guidance as and when required.
20. In case, any activity does not find place in the AWPB of concerned VDC and needs to be executed as per the necessity and demand of communities, photocopy of the necessary resolution of the VDC justifying the necessity of the work should be submitted by the FNGO along with the estimates of the said work for scrutiny and approval at MPA/PMU level.
21. Team leader of FNGOs shall submit the requisition for case records along with two copies of the estimates to MPA for Technical Sanction and administrative approval. Concerned Expert of MPA will examine it against the AWPB. After the technical sanction, it should be placed for administrative approval of SO, MPA. After which MIS Assistant (DEO) will issue the case records and the original copy of the estimate observing the existing procedures.
22. MIS Assistant (DEO) of MPA should keep track of issuing each case record against a particular activity by way of maintaining a case record issue register, if it is not being maintained presently.
23. FNGO shall be held responsible and accountable for initiation of works before issuance of the case records by MPA. FNGO should keep the approved estimates in the concerned case records and also maintain two copies of duplicate case records of all the works undertaken/ongoing at their offices as well as VDC office which shall also be verified during the field visit of staff of MPA and PMU.

Sacred Fencing:-

1. This intervention has been planned for the purpose of improvements in the sacred sites and places of worship within the village.
2. It can be also be utilised in the partial support in provision of instruments used (if needed), during their festive time to preserve their culture.
3. An amount of Rs. 5000/- will be supported for the same.

Policy Initiatives:-

1. In this intervention, Studies & Survey will be conducted to document traditional tribal knowledge of medicinal plants, indigenous seeds, crops besides their folklore, culture, artesian practices and establish a legal defence fund.
2. Reviewing to the studies, the issues pertaining to the PVTGs with in legal boundaries which has not been addressed yet will be formulated in Policy & Advocacy initiatives and Present to Government for considerable steps to be taken.
3. These interventions will be taken up by PMU.
4. An amount of Rs. 1,00,000/- for Studies & Survey activity and Rs.2,00,000/- for Legal advocacy has been allotted.