



**DISTRICT IRRIGATION PLAN
UPPER SIANG, ARUNACHAL PRADESH**



NABARD CONSULTANCY SERVICES PVT. LTD.

District Irrigation Plan, 2015-2020 Upper Siang, Arunachal Pradesh



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Foreword by DLIC

DLIC MEMBERS CERTIFICATION


This is to certify that the DIP of Upper Siang District under PMKSY has been prepared by NABARD Consultancy Services in coordination with all line Departments of PMKSY and other allied member representatives. The Strategic Action Plan and other data submitted by our Department to NABCONS has been suitably incorporated in the DIP and authenticated by us as correct.

In view of the above, our Department has no objection if the Chairman and Member-Secretary of PMKSY, Upper Siang District has approved the DIP.

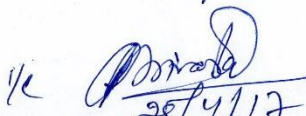
DDA Agriculture


25/4/2017


Executive Engineer, WRD


25/04/2017

DHO, Horticulture


25/4/17

PD, DRDA


25/4/17

FOREWORD

Water is vital for human and animal life and for maintaining ecological balance for developmental efforts. With the ever-increasing demand for water due to population growth, urbanization and industrialization, making water available for multiple uses in an economical and optimal manner assumes great significance. Against the above backdrop, Government of India formulated PMKSY with the vision of extending the coverage of irrigation ("Har Khet Ko Pani") and improving water-use efficiency (More Crop Per Drop) in a focused manner with end-to-end solution on water resource creation, distribution, management, field application and extension activities. Under PMKSY, an integrated planning and management of water resources has been envisaged through estimation of water budget for each of the districts and sub-districts and preparation of strategic action plan to address the water gap through District Irrigation Plans (DIPs).

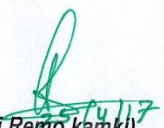
PMKSY will be implemented only in an area development mode by adopting a decentralized State level planning and project execution structure that will allow States to draw up their own irrigation development plans based on DIPs and SIPs with a horizon of 5-7 years.

This District Irrigation Plan has been prepared based on an assessment of water resource availability and demand for water resource from multiple users, present and future water balance at block and district levels and multiple strategies to augment water resources and improve efficiency of existing water facilities through Strategic Action Plan under PMKSY.

Preparation of the District Irrigation Plan (DIP) required coordinated efforts by multiple stakeholders and departments. The efforts made by the Department of Agriculture, which is the nodal Department for implementation of PMKSY, WRD, Horticulture Department, District Rural Development Agency (DRDA) as also the support received from NABARD Consultancy Services (NABCONS) in preparation of the District Irrigation Plan of Upper Siang, District of Arunachal Pradesh is duly acknowledged.

The total financial outlay under the Scheme for Upper Siang District is **Rs. 78270.95 lakh**.


After threadbare discussion, the District Level Implementation Committee (DLIC) unanimously accepted and approved the planned outlay of **Rs.78270.95 lakh** under the PMKSY for 05 Years (2015 to 2020).



(Shri Remo kamki)
Deputy Commissioner cum Chairman, PMKSY
Upper Siang District
Arunachal Pradesh
Deputy Commissioner
Upper Siang District
Yingkiong.



CERTIFICATE

This is to certify that District Irrigation Plan (DIP) for Upper Siang District, Arunachal Pradesh has been prepared by the NABCONS in collaboration with the DLIC as per the operational Guidelines of PMKSY issued by the Ministry of Agriculture Cooperation and Farmers Welfare, Govt. of India, in the year 2015-2016. The DIP is approved and hereby vetted through DLIC.


(Shri Remo Kamki)
Deputy Commissioner-cum-Chairman
DLIC, PMKSY
Upper Siang District
Arunachal Pradesh


23/04/2017
(AD PANGAM), Director-Cum-PO
Upper Siang Dist
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DDA -cum-Member Secretary
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Upper Siang District
Arunachal Pradesh

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ABBREVIATION

AIBP	Accelerated Irrigation Benefits Programme
ATMA	Agriculture Technology Management Agency
BCM	Billion Cubic Meters
Bgl	Below ground Level
BPL	Below Poverty Line
C & RD Block	Community and Rural Development Block
CAD	Command Area Development
CADWM	Command Area Development and Water Management
CCA	Cultivable Command Area
C-DAP	Comprehensive State Agriculture Plan
CI	Cropping Intensity
DIP	District Irrigation Plan
DLIC	District Level Implementation Committee
DRDA	District Rural Development Agency
GCA	Gross Cropped Area
GIA	Gross Irrigated Area
GIS	Geographic Information System
GoI	Government of India
GoM	Government of Manipur
GEC	Ground Water Estimation Committee
HKKP	Har Khet Ko Pani
I&PH	Irrigation and Public Health Department
IWMP	Integrated Watershed Management Programme
kg/ha	Kilogram per hectare
LPD	Litre Per Day
LULC	Land Use/Land Cover
MCM	Million Cubic Meters
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MI	Micro Irrigation
MIS	Management Information System
NABARD	National Bank for Agriculture and Rural Development
NHH	Number of Household
NITI Aayog	National Institution for Transforming India Aayog
NM	Number of Member
No.	Number
NRLM	National Rural Livelihoods Mission
NRM	Natural Resource Management
NSA	Net Sown Area
PRI	Panchayati Raj Institutions
Qtl/yr.	Quintal per year
RIDF	Rural Infrastructure Development Fund
RWD	Rural Work Department
SC/ST	Scheduled Caste/ Scheduled Tribe

DISTRICT IRRIGATION PLAN – UPPER SIANG

SIP	State Irrigation Plan
SSI	Small Scale Industries
STP	Sewage Treatment Plant
SWMA	Supplementary Water Management Activities
TGA	Total Geographical Area
WRD	Water Resource Department

Executive summary

In an agrarian economy like India, agriculture utilizes the major share of country's exploitable water resources. Though the sector utilizes the maximum share of exploitable water resources, availability of the same at different locations to different extent makes it vital to adopt effective utilization of water through storage, channelizing and judicial use. At some places like Punjab and Haryana, the environmental and socio-economic rationale for this capture by the sector is now being questioned. Accordingly, it is needed to challenge and change the fundamentals of the prevailing view of water resources exploitation. A new and more suitable approach to water resources allocation is necessary if the population is to be adequately fed, without further degradation and destruction of the critical ecosystem services. Water productivity needs to be enhanced considerably, and economic cost-benefit analysis and pricing regimes can play a significant role in such a process. However, these economic measures will not be sufficient on their own. They will need to be buttressed by technological innovation and institutional changes in order to encourage a more equitable distribution of resources and to mitigate potential international conflicts across 'shared' water basins.

Water has unique characteristics that determine both its allocation and use as a resource by agriculture. Agricultural use of water for irrigation is itself contingent on land resources. In a situation of growing water scarcity and rising demands for non-agricultural (household and industrial) use of water, reassessment of sectoral allocations of water are inevitable. In developing countries, irrigated agriculture plays a vital role in contributing towards domestic food security and poverty alleviation. Therefore, achievement of these objectives is dependent on adequate allocations of water to agriculture. Justification of such allocations requires that irrigated agriculture be a cost-effective means of achieving stated political or social objectives, such as food security or poverty alleviation, and that all externalities be taken into account in the pricing mechanism. Improved allocation of irrigation water is required within the agriculture sectors in order to achieve greater efficiency in the use of irrigation water and existing irrigation infrastructure. Reallocation is also required in order to reduce waterlogging and salinization of irrigated land, to decrease the negative environmental impacts and other externalities of irrigation (caused by overextraction of groundwater and depletion and pollution of surface water).

Government of India launched Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) to address the constraints in providing assured irrigation as well as increasing efficiency and productivity of current water use to bring more prosperity to the rural areas. Priorities of Government of India were reflected in the Hon'ble President's address to the joint Session of the Parliament of 16th Lok Sabha where he indicated that "Each drop of water is precious. Government is committed to giving high priority to water security. It will complete the long pending irrigation projects on priority and launch the 'Pradhan Mantri Krishi Sinchayee Yojana' with the motto of 'Har Khet Ko Pani'. There is a need for seriously considering all options including linking of rivers, where feasible; for ensuring optimal use of our water resources to prevent the recurrence of floods and drought. By harnessing rain water through 'Jal Sanchay' and 'Jal Sinchan', we will nurture water conservation and ground water recharge. Micro irrigation will be popularised to ensure 'Per drop-More crop'".

PMKSY has been approved with an indicative outlay of Rs.50, 000 crore over a period of five years from 2015-16 to 2019-20. The programme is an amalgamation of on-going schemes of Ministry of Water Resources, River Development and Ganga Rejuvenation, Ministry of Agriculture & Cooperation and Ministry of Rural Development. The existing schemes AIBP, CADWM, MI, SWMA and Watershed & Convergence with MGNREGA were brought together under the umbrella program of PMKSY. Further the scheme seeks convergence with scheme like Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNRES), Rashtriya Krishi Vikas Yojana (RKVY), Jawaharlal Nehru National Solar Mission and Rural Electrification programmes (JLNNSM&REP), Rural Infrastructure Development Fund (RIDF), Members of Parliament Local Area Development Scheme (MPLAD), Members of Legislative Assembly Local Area Development Fund (MLALAD), Local Body Funds (LBF), Working Plan of State Forest Department (WPSFD) etc. The PMKSY will be implemented in an area development mode only by adopting a decentralized state level planning and projectised execution structure that will allow the state to draw up their own irrigation development plans based on DIPs and SIPs with a horizon of 5-7 years. The program will be supervised and coordinated utilizing the existing mechanism and structure available under Rashtriya Krishi Vikas Yojana (RKVY) program with state agriculture department acting as the State Nodal Agency for implementation of PMKSY. However, the implementing departments for the four components like AIBP,

PMKSY (Har Khet Ko Pani), PMKSY (Per drop more crop) and PMKSY (watershed development) will be decided by the respective program ministry/department.

The 05 chapters along with introduction chapter, explains the profile of district, its water requirement for agriculture and allied sector, water availability, assessment of water requirement for various sectors and strategic action plan for augmentation and effective management of available water resources.

District Demography: In 2011, Upper Siang had population of 35,320 of which male and female were 18,699 and 16,621 respectively. In 2001 census, Upper Siang had a population of 33,363 of which males were 18,057 and remaining 15,306 were females. There was change of 5.87 percent in the population compared to population as per 2001. In the previous census of India 2001, Upper Siang District recorded increase of 20.10 percent to its population compared to 1991.

Agriculture in Upper Siang: Cereals are the major crop among agricultural crops of the district. The area under cereals cultivation during 2015-16 was 5604.32 hectare which was around 55% of the total area under agricultural crops. Kharif is the main crop season for agricultural crops. Out of total 10191.93 hectare area under agriculture, 8633.95 hectare was cultivated during Kharif while 1557.98 hectare was cultivated during Rabi.

District Water Profile: Groundwater is available in all geological formations in the district depending upon their primary or secondary porosities, geomorphologic and hydrogeologic set up. GEC'97 couldn't adopt as the district area was more than 20% slope. Net annual Ground Water Draft is not available.

Demand for water and the gap: The total water gap for the district has been estimated at 119.75 MCM at present and 119.79 MCM during 2020 which indicates that the district is consuming more water than available water. However, in Singa Galling block, there is a negative gap (surplus) of 44.51 and 44.51 MCM in present which is a good condition.

PMKSY Financial Proposal: Total plan of Upper Siang district for five years works out to be **Rs. 78270.95 lakh** (Table 5-1). Maximum share of Rs. 60358.31 lakh (77%) is for WRD followed by Agriculture department with Rs. 8896.94 lakh (11%). Share of Horticulture and Rural Development (DRDA) department Rs. 595.20 lakh (1%) and Rs. 8420.50 lakh (11%) respectively.

INTRODUCTION

Background

Preparation of decentralized area specific district planning process visualized in various plans took concrete shape through the years and initiatives like specific guidelines on methodologies and processes for preparation of district plans; framework for preparation of perspective plan, medium term and annual plans by then planning commission in 1969 and the 73rd and 74th constitutional amendments conferring constitutional status to Panchayats at district and sub district level; local self-government in urban areas; constitution of district planning committee to consolidate the plans prepared at Panchayats and municipalities and prepare a draft development plan for the whole district.

The decentralized planning process was further strengthened through emphasis by planning commission on preparation of district level plans and making it an integral part of the process of preparation of the states 11th five year plan. The Planning commission issued guidelines in August 2006 for preparation of the district plans. The guidelines define the District Planning as ‘the process of preparing an integrated plan for the local government sector in a district taking into account the resources (natural, human and financial) available and covering the sectoral activities and schemes assigned to the district level and below and those implemented through local governments in a state. The document that embodies this statement of resources and their allocation for various purposes is known as the District Plan”.

Government of India through a resolution in National Development Council on 29th May 2007 conceived a special Additional Central Assistance Scheme (ACAS) to address the slow growth of agriculture and allied sectors by incentivizing states to draw up plans for their agriculture sectors more comprehensively. The NDC resolution states "GoI will introduce a new Additional Central Assistance Scheme to incentivize states to draw up plans for their agriculture sector more comprehensively, taking agro-climatic conditions, natural resource issues and technology into account, and integrating livestock, poultry and fisheries, etc. This will involve a new scheme for Additional Central Assistance (ACA) to State Plans, administered by the Union Ministry of Agriculture over and above its existing Centrally Sponsored Schemes, to supplement the State-

specific strategies including special schemes for beneficiaries of land reforms. The newly created National Rainfed Area Authority will, on request, assist States in planning for rainfed areas".

The NDC in its resolution advised the states to prepare a comprehensive district agriculture plans (C-DAP) that will fully utilize available resources and will include allied agriculture sectors. Further, GOI issued a manual on preparation of comprehensive district agriculture plans to help the states prepare C-DAP. As per these guidelines, the objective of district planning is ‘to design an integrated and participatory action plan for the development of local area in general and agriculture and allied sectors in particular’. The objectives of Comprehensive District Agriculture Plan (C-DAP) are:

- To prepare a Comprehensive District Agriculture Plan (C-DAP) through participatory process involving various organisations and stakeholders.
- To enable optimum utilisation of scarce natural, physical & financial resources.
- To assess and plan for the infrastructure required to support the agriculture development.
- To establish linkages with the required institutional support services, like credit, technology transfer, ICT, research etc.
- To evolve an action plan for achieving sustainable agricultural growth with food security and cropping system that will improve farmers’ income.

The guidelines required the state/district authorities to (i) ensure that the agricultural plans are prepared for the district and then integrated into the agricultural plans of the State based on the agro-climatic conditions, availability of technology, trained manpower and natural resources; (ii) local needs / crops / feed and fodder / animal husbandry / dairying / fisheries / priorities are reflected in the plan; (iii) productivity gaps for important crops and livestock and fisheries are reduced; and (iv) the returns to the farmers from these are maximized.

The latest move in the process of strengthening of decentralized planning process was the Government of India guidelines issued in 2015 in the form of a template for the preparation of District Irrigation Plan (DIP) and State Irrigation Plan (SIP) as part of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) program and made the preparation of DIP and SIP mandatory for the states to receive funds from the program. The present report is a product of these long drawn

efforts of Government of India to strengthen the decentralized planning process in the country focusing on the vital resource i.e., water.

Water is of vital importance for human & animal life, maintenance of ecological balance and promotion of developmental activities. Considering its vital importance and ever increasing demand for water, in the face of population growth, urbanization & industrialization and considerations of climatic change, making water, an increasingly a scarce resource, available to multiple uses, planning and management of this vital resources, utilization of water economically, optimally and equitably assumes greater importance.

According to the 12th Five year Plan the water budget estimates of India by Ministry of Water Resources suggests an availability of 1123 billion cubic meters (BCM) against a current estimated demand of 710 BCM. The Standing Committee of the Ministry of Water Resources estimates that this water demand will rise to 1093 BCM by 2025. Though the existing water availability in the immediate future seems to be adequate, with the near constant supply of water resources in the face of increasing demand on account of population growth, urbanisation and industrialization will strain the water supply-demand balance.

The per capita water availability which stood at 5,177 cubic meters in 1951 was reduced to 1820 cubic meters in 2001 while the international prescribed limit is 1800 cubic meters. The projected per capita availability of water is 1341 cubic meters in 2025 and 1140 cubic meters in 2050 suggesting shortage of water in the medium term¹. Further, the all India water balance estimates does not reflect the variations in water balance across time and space- certain areas having a positive water balance and the others facing acute shortage. The problem is further accentuated by water quality related issues.

With the abundant surface and ground water supply in the first five decades since independence, more than 80 percent of the total available water resources were allocated for irrigation purposes and the rest meeting the domestic and industrial demands. In a recent study² on the demand for

¹Ministry of Water Resources (2011), Strategic Plan for Ministry of Water Resources, Government of India, New Delhi.

²Amarasinghe, U.A., Shah T., Turrall, H. and Anand, B.K. 2007. *India's water future to 2025-2050: Business-as-usual scenario and deviations*. Research Report 123, International Water Management Institute, Colombo.

water from agriculture, domestic and industrial uses in 2000, 2025 and 2050 seems to suggest that domestic demand (34 BCM in 2000, 66 BCM in 2025 and 101 BCM in 2050) and industrial demand (42 BCM in 2000, 92 BCM in 2025 and 161 BCM in 2050) for water will utilize the total balance water available while agriculture demand for water will be (605 BCM in 2000, 675 BCM in 2025 and 637 BCM in 2050). This change is partly because of the changing sectoral contributions of India's GDP and also partly because of dynamics of irrigation development in the country where the initial expansion in area under irrigation is propelled by the availability of abundant water resources and availability of good quality land. This is no longer the case in many of the states where the availability of land and water are serious constraints for further expansion of irrigation. Further, as per the erstwhile planning commission up to March 2012 out of 141 million hectares of net sown area in the country 114 (or 81%) million hectares is Irrigation Potential Created (IPC) and 88 (or 62%) million hectares is Irrigation Potential Utilised (IPU) leaving almost 20% of irrigated potential unutilized. This leaves 40 percent of the net sown area in the country dependent on rainfall which makes farming a high risk and less productive.

The competing demands for water resources and the emerging issues and concerns were to be addressed through certain basic principles and commonality in approaches in dealing with planning, development and management of water resources³ under an Integrated Water Resource Management framework. The main objectives of water resource management as delineated in National Water Policy 2012 are:

- a) Planning, development and management of water resources need to be governed by common integrated perspective considering local, regional, State and national context, having an environmentally sound basis, keeping in view the human, social and economic needs.
- b) Principle of equity and social justice must inform use and allocation of water.
- c) Good governance through transparent informed decision making is crucial to the objectives of equity, social justice and sustainability. Meaningful intensive participation, transparency and accountability should guide decision making and regulation of water resources.

³Ministry of Water Resources, National Water Policy, 2012, Government of India, New Delhi.

- d) Water needs to be managed as a common pool community resource held, by the state, under public trust doctrine to achieve food security, support livelihood, and ensure equitable and sustainable development for all.
- e) Water is essential for sustenance of eco-system, and therefore, minimum ecological needs should be given due consideration.
- f) Safe Water for drinking and sanitation should be considered as pre-emptive needs, followed by high priority allocation for other basic domestic needs (including needs of animals), achieving food security, supporting sustenance agriculture and minimum eco-system needs. Available water, after meeting the above needs, should be allocated in a manner to promote its conservation and efficient use.
- g) All the elements of the water cycle, i.e., evapo-transpiration, precipitation, runoff, river, lakes, soil moisture, and ground water, sea, etc., are interdependent and the basic hydrological unit is the river basin, which should be considered as the basic hydrological unit for planning.
- h) Given the limits on enhancing the availability of utilizable water resources and increased variability in supplies due to climate change, meeting the future needs will depend more on demand management, and hence, this needs to be given priority, especially through (a) evolving an agricultural system which economizes on water use and maximizes value from water, and (b) bringing in maximum efficiency in use of water and avoiding wastages.
- i) Water quality and quantity are interlinked and need to be managed in an integrated manner, consistent with broader environmental management approaches inter-alia including the use of economic incentives and penalties to reduce pollution and wastage.
- j) The impact of climate change on water resources availability must be factored into water management related decisions. Water using activities need to be regulated keeping in mind the local geo climatic and hydrological situation.

Government of India launched Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) to address the constraints in providing assured irrigation as well as increasing efficiency and productivity of current water use to bring more prosperity to the rural areas. Priorities of Government of India were reflected in the Hon'ble President's address to the joint Session of the Parliament of 16th Lok Sabha where he indicated that "***Each drop of water is precious. Government is committed***

to giving high priority to water security. It will complete the long pending irrigation projects on priority and launch the ‘Pradhan Mantri Krishi Sinchayee Yojana’ with the motto of ‘Har Khet Ko Pani’. There is a need for seriously considering all options including linking of rivers, where feasible; for ensuring optimal use of our water resources to prevent the recurrence of floods and drought. By harnessing rain water through ‘Jal Sanchay’ and ‘Jal Sinchan’, we will nurture water conservation and ground water recharge. Micro irrigation will be popularised to ensure ‘Per drop-More crop’.

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The funds under this program would be provided to the states as per the pattern of assistance of Centrally Sponsored Schemes (CSS) decided by the Ministry of Finance and NITI Aayog. During 2015-16 the existing pattern of assistance of ongoing scheme was continued. An outlay of Rs. 50,000 crore has been approved for 2015-20. The financial assistance provided to the state

governments from this centrally sponsored scheme is subject to fulfillment of certain conditions. Firstly, a state will become eligible to access PMKSY fund only if it has prepared the District Irrigation Plans (DIP) and State Irrigation Plan (SIP), excepting for the initial year, and the expenditure in water resource development for agriculture sector in the year under consideration is not less than the baseline expenditure, which is defined as the average of the expenditure in irrigation sector irrespective of the department in the state plan in three years prior to the year under consideration. Secondly, States will be given additional weightage for levying charges on water and electricity for irrigation purposes, so as to ensure sustainability of the programme. Thirdly, interstate allocation of PMKSY fund will be decided based on

- Share of percentage of unirrigated area in the state vis-à-vis national average including prominence of areas classified under Desert Development Programme (DDP) and Drought Prone Area Development Programme (DPAP)
- Increase in percentage share of expenditure on water resource development for agriculture sector in State Plan expenditure in the previous year over three years prior to it and
- Improvement in irrigation efficiency in the state.

Vision

The overarching vision of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) will be to ensure access to some means of protective irrigation to all agricultural farms in the country, to produce ‘per drop more crop’, thus bringing much desired rural prosperity.

Objective

The objectives of the PMKSY are to:

- a) Achieve convergence of investments in irrigation at the field level (preparation of district level and, if required, sub district level water use plans).
- b) Enhance the physical access of water on the farm and expand cultivable area under assured irrigation (Har Khet ko Pani),
- c) Integration of water source, distribution and its efficient use, to make best use of water through appropriate technologies and practices.

- d) Improve on-farm water use efficiency to reduce wastage and increase availability both in duration and extent,
- e) Enhance the adoption of precision-irrigation and other water saving technologies (More crop per drop).
- f) Enhance recharge of aquifers and introduce sustainable water conservation practices
- g) Ensure the integrated development of rainfed areas using the watershed approach towards soil and water conservation, regeneration of ground water, arresting runoff, providing livelihood options and other NRM activities.
- h) Promote extension activities relating to water harvesting, water management and crop alignment for farmers and grass root level field functionaries.
- i) Explore the feasibility of reusing treated municipal waste water for peri-urban agriculture, and
- j) Attract greater private investments in irrigation.

Strategy/approach

To achieve these objectives PMKSY adopted strategies that include

- a) Creation of new water sources; repair, restoration and renovation of defunct water sources; construction of water harvesting structures, secondary & micro storage, groundwater development, enhancing potentials of traditional water bodies at village level like Jal Mandir (Gujarat); Khatri, Kuhl (H.P.); Zabo (Nagaland); Eri, Ooranis (T.N.); Dongs (Assam); Katas, Bandhas (Odisha and M.P.) etc.
- b) Developing/augmenting distribution network where irrigation sources (both assured and protective) are available or created;
- c) Promotion of scientific moisture conservation and run off control measures to improve ground water recharge so as to create opportunities for farmers to access recharged water through shallow tube/dug wells;
- d) Promoting efficient water conveyance and field application devices within the farm viz, underground piping system, Drip & Sprinklers, pivots, rain-guns and other application devices etc.;
- e) Encouraging community irrigation through registered user groups/farmer producers' organisations/NGOs; and

- f) Farmer oriented activities like capacity building, training and exposure visits, demonstrations, farm schools, skill development in efficient water and crop management practices (crop alignment) including large scale awareness on more crop per drop of water through mass media campaign, exhibitions, field days, and extension activities through short animation films etc.

Programme Components

PMKSY has following four components:

1. Accelerated Irrigation Benefit Programme (AIBP) to focus on faster completion of ongoing Major and Medium Irrigation including National Projects.

2. PMKSY (Har Khet ko Pani): This component focuses on-

- a) Creation of new water sources through Minor Irrigation (both surface and ground water)
- b) Repair, restoration and renovation of water bodies; strengthening carrying capacity of traditional water sources, construction rain water harvesting structures (Jal Sanchay);
- c) Command area development, strengthening and creation of distribution network from source to the farm;
- d) Ground water development in the areas where it is abundant, so that sink is created to store runoff/ flood water during peak rainy season.
- e) Improvement in water management and distribution system for water bodies to take advantage of the available source which is not tapped to its fullest capacity (deriving benefits from low hanging fruits). At least 10% of the command area to be covered under micro/precision irrigation.
- f) Diversion of water from source of different location where it is plenty to nearby water scarce areas, lift irrigation from water bodies/rivers at lower elevation to supplement requirements beyond IWMP and MGNREGS irrespective of irrigation command.
- g) Creating and rejuvenating traditional water storage systems like Khatri, Kuhl etc. at feasible locations.

3. PMKSY (Per Drop More Crop)

- a) Programme management, preparation of State/District Irrigation Plan, approval of annual action plan, Monitoring etc.

- b) Promoting efficient water conveyance and precision water application devices like drips, sprinklers, pivots, rain-guns in the farm (Jal Sinchan);
- c) Topping up of input cost particularly under civil construction beyond permissible limit (40%), under MGNREGS for activities like lining inlet, outlet, silt traps, distribution system etc.
- d) Construction of micro irrigation structures to supplement source creation activities including tube wells and dug wells (in areas where ground water is available and not under semi critical/ critical/ over exploited category of development) which are not supported under AIBP, PMKSY (Har Khet ko Pani), PMKSY (Watershed) and MGNREGS as per Block/district irrigation plan.
- e) Secondary storage structures at tail end of canal system to store water when available in abundance (rainy season) or from perennial sources like streams for use during dry periods through effective on-farm water management;
- f) Water lifting devices like diesel/ electric/ solar pumpsets including water carriage pipes, underground piping system.
- g) Extension activities for promotion of scientific moisture conservation and agronomic measures including cropping alignment to maximise use of available water including rainfall and minimise irrigation requirement (Jal Sarankchan);
- h) Capacity building, training and awareness campaign including low cost publications, use of pico projectors and low cost films for encouraging potential use water source through technological, agronomic and management practices including community irrigation.
- i) The extension workers will be empowered to disseminate relevant technologies under PMKSY only after requisite training is provided to them especially in the area of promotion of scientific moisture conservation and agronomic measures, improved/ innovative distribution system like pipe and box outlet system, etc. Appropriate Domain Experts will act as Master Trainers.
- j) Information Communication Technology (ICT) interventions through NeGP-A to be made use in the field of water use efficiency, precision irrigation technologies, on farm water management, crop alignment etc. and also to do intensive monitoring of the Scheme.

4. PMKSY (Watershed Development)

- a) Effective management of runoff water and improved soil & moisture conservation activities such as ridge area treatment, drainage line treatment, rain water harvesting, in-situ moisture conservation and other allied activities on watershed basis.
- b) Converging with MGNREGS for creation of water source to full potential in identified backward rainfed Blocks including renovation of traditional water bodies

Rationale/ Justification

In reference to the status and need of irrigation, the water resource management including irrigation related priorities was identified for Sirmour district by the peoples' representatives of district with support from administration and technical experts. For instance the reports of Strategic Research and Extension Plan (SREP) prepared under ATMA program, Comprehensive District Agriculture Plan (C-DAP) prepared as part of Rashtriya Krishi Vikas Yojana (RKVY), Potential Linked Credit Plans (PLP) of NABARD and the Integrated District Development Plan etc. identified number of irrigation related issues for Sirmour district including (i) promoting water use efficiency through sprinkler and drip irrigation; (ii) promoting protected polyhouse cultivation to minimize risk factors and enhance quality and productivity; (iii) Improvement of on-farm water delivery and efficiency of existing irrigation systems; (iv) promotion of soil conservation of arable & non-arable land through engineering measures; (v) creation of new water harvesting structures, check dams, ponds, tanks, etc (vi) increase the forest cover in the district and (vii) land improvement measures.

Methodology

During the course of preparation of District Irrigation Plan (DIP) the team visited Upper Siang district to collect data and have interaction with all the stakeholders. Methodology adopted to prepare DIP is outlined in brief as under:

- a) Collection of primary and secondary data from field from various sources including published documents and websites.

- b) Various meetings were held to obtain ground level realities and data from key personnel/stakeholders through structured, unstructured interviews, focused group discussions etc.
- c) Meetings with various State Government departments and related institutions were held
- d) Meeting was also held with State Level authorities.
- e) GIS maps of the areas/clusters were studied to understand the land morphology, topography of the district.
- f) Focused group discussions and interaction with agriculture officers, horticulture officers, soil conservation officers, extension officers, rural development department, animal husbandry department, irrigation officers both at Blocks and district level for identifying the key issues and focus areas of the region.
- g) Discussion with NABARD officer of the district was also held during the visit.

On the basis of detailed discussion and analysis of data, the team arrived at the projections of various components of PMKSY and Department wise plan for four years from 2016-17 to 2019-20 as detailed in the plan.

Chapter 1 : General Information of the District

1.1 District Profile

Upper Siang is an administrative district in the state of Arunachal Pradesh in India. It is the fourth least populous district in the country (out of 640). The district headquarters are located at Yingkiong and with geographical area of 6188 Sq Km, a veritable treasure house of nature in its full splendour, has 11 Administrative Circles with a total population of 33, 146 persons (2001 Census). It is a mountaineous region endowed with rich natural resources and biodiversity, deep gorges and fast flowing streams and rivulets, which form the tributaries of the mighty Siang River. It flows through the district running into Indian Territory at a point near Gelling in the Indo-China border. It is inhabited by Adi, Memba, Khamba and Idu Mishmi tribes who have been harmoniously living in the cradle of nature since time immemorial with colourful festivals / rituals like Solung, Aran, Reh, Lossar, Dihang, etc. It is a thinly populated hilly tract lying roughly between Latitude 28.758878° “N” and the Longitude 95.22667° “E”. It is bounded by Upper & Lower Dibang Valley District in the East, East Siang in the South West, China (Tibet) in the North, West Siang in the West.



Map 1: Location Map of district

Table 1.1 District Profile

S. No.	Name of the District	District Code	Latitude	Longitude
1	Upper Siang	252	Between 27.45"N and 28.13"N	Between 93.13"E and 94.36"E

Brief History of the District

Upper Siang District came into existence on 23rd November, 1994. It is a thinly populated hilly tract lying roughly between Latitude 28.758878° “N” and the Longitude 95.22667° “E” comprising roughly 6590 square kilometer area. It is bounded by Upper & Lower Dibang Valley District in the East, East Siang in the South West, China (Tibet) in the North, West Siang in the West. The Upper Siang District is wild mountainous area and presents a remarkable topographical variety. The mighty Siang River flows through this District via East Siang District which joins the Brahmaputra in the Plains of Assam. There are several tributaries of Siang River among which Yamne, Nyigeng, Yembung are worth mentioning.

The history of Upper Siang can be traced back to the time when Arunachal Pradesh remained as an independent area without any administrative control till the Anglo-Burmese War in 1826-61 and declared as a conquered territory by the British and came under non-regulated area between 1826-61.

The Arunachal also remained as a part of Bengal until a separate post of Chief Commissioner was created and scheduled district regulation was passed in 1874. The Arunachal acquired an identity when it was separated from Assam with the name North-East Frontier Tract (NEFT) after the Govt. of India, Foreign & Political Department Notification of 1914. Consequently, the present area under Upper Siang became part of the Central Section of the NEFT under the Administrative Control of Political Officer.

In 1919, the Central Section along with the Eastern Section of the same tract was renamed as Sadiya Frontier Tract with its headquarters at Sadiya. In 1948, Sadiya Frontier Tract was bifurcated into two separate areas with Administrative Charges, namely Abor Hills District and Mishmi Hills District.

After India’s Independence, Arunachal was under Part-“B” of the 6th Schedule of the Constitution of India as part of Assam. The area further became North-East Frontier Agency (NEFA) in 1951 and was reconstituted under NEFA (Administrative) Regulation in 1954 and

subsequently scheduled as part of Assam during 1950-65 wherein Abor Hills District was renamed as Siang Frontier Division.

In 1965, when the responsibility of NEFA Administration was transferred to the Ministry of Home Affairs (as per recommendation of the Daying Ering Commission), the Siang Frontier division was renamed as Siang District and Political officer was redesignated as Deputy Commissioner with its headquarters at Along.

In 1980, the Siang District was bifurcated into East Siang and West Siang District. The present area of Upper Siang remained under East Siang district with its headquarters at Pasighat. Finally on the 23rd November, 1994, Upper Siang was carved-out of East Siang district with its headquarters at Yingkiong.

Local Administrative set up is an old age tradition wherein traditional village Councils managed the overall administration of the village. Cadastral survey has not been done so far in Arunachal Pradesh and revenue system in the village has not been introduced as yet. As such each area with locally recognized boundaries is considered as a village.

As regard the composition of the people, the District is predominantly inhabited by the Scheduled Tribes of Arunachal Pradesh. Adis are the main Tribe of the District followed by Membas, Khambas and Mishmis. The Adis with its Sub-Tribes, like Pasi, Padam, Pangi, Komkar Simong, Tangam Karkoi, and Milang are main inhabitants of this District.

Administrative set up

Upper Siang District came into being as a new District in the year 1994 carving out from East Siang District under the notification by the Govt. of Arunachal Pradesh dated 23rd November, 1994.

After the formation of Upper Siang District the following administrative Units have come under its control.

1. Yingkiong
2. Gelling
3. Singa
4. Mariyang
5. Palling
6. Jengging
7. Tuting

- 8. Geku
- 9. Miging
- 10. Katan

Three Sub-divisions were created under Upper Siang District. The subdivisions are Yingkiong, Mariyang and Tuting. The entire district is under the charge of the Deputy Commissioner, who happens to be the administrative and judicial head so far as the district is concerned. He is assisted by number of Additional Deputy Commissioners, Sub-divisional Officers, Extra Assistant Commissioners and Circle Officers. The sub-divisions are headed by Subdivisional Officer, who are directly responsible to the Deputy Commissioner.

The lowest administrative unit is a Circle, which is looked after by a Circle Officer. A Circle can be defined as a group of villages and not as a territorial unit. These villages have their own customary administrative systems in the form of traditional village councils.

The Panchayat Raj System was introduced in the district with the North East Frontier Agency (Panchayat Raj) Regulation, 1967 and continued till 1998. At present this system is not in operation.

At the time of conducting the 2011 Census, following administrative setup was in operation in the district:

Table 1.2 Brief Information about District

District	Sub-Division		Circle	Village
UPPER SIANG	Yingkiong Sub Division	1	Jengging	13
		2	Yingkiong	7
	Tuting SubDivision	1	Tuting	20
		2	Gelling	6
		3	Singa	14
		4	Migging	5
		5	Paling	5
	Mariyang Sub Division	1	Mariyang	17
		2	Geku	13
		3	Katan	8
		4	Mopom (Adi Pasi)	4
	3	11		112

Source: Census of India, Upper Siang, 2011

1.2 District Demography

An official Census 2011 detail of Upper Siang, a district of Arunachal Pradesh has been released by Directorate of Census Operations in Arunachal Pradesh. Enumeration of key persons was also done by census officials in Upper Siang District of Arunachal Pradesh.

In 2011, Upper Siang had population of 35,320 of which male and female were 18,699 and 16,621 respectively. In 2001 census, Upper Siang had a population of 33,363 of which males were 18,057 and remaining 15,306 were females.

There was change of 5.87 percent in the population compared to population as per 2001. In the previous census of India 2001, Upper Siang District recorded increase of 20.10 percent to its population compared to 1991.

Table 1.3 Demography of District

Name of the Blocks	Population				ST		General		Total	
	M	F	CH	Total	NHH	NM	NHH	NM	NHH	NM
Tuting	3903	2774	901	6677	997	4971	250	1706	1247	6677
Singa-Gelling	888	880	237	1768	251	1413	82	355	333	1768
Yingkiong	1017	1016	254	2033	449	1986	18	47	467	2033
Jengging	1821	1472	364	3293	551	2061	317	1232	868	3293
Geku	3751	3638	1278	7389	1300	6955	127	434	1427	7389
Mariyang	3955	3665	1069	7620	1251	7112	136	508	1387	7620
Urban Area	3,364	3,176	885	6,540	904	3970	691	2570	1595	6,540
Grand Total	18699	16621	4988	35320	5703	28468	1621	6852	7324	35320

Source: Census of India, Upper Siang, 2011

*M- Male, F- Female, CH- Children 0-14 years, NHH- No. of households, NM- No. of members

Mariyang Block is the most populated block of the district whereas Singa- Gelling has lowest population. Same trend exists in population density of the Blocks. Upper Siang has a sex ratio of 889 females for every 1000 males and a literacy rate of 59.94%.

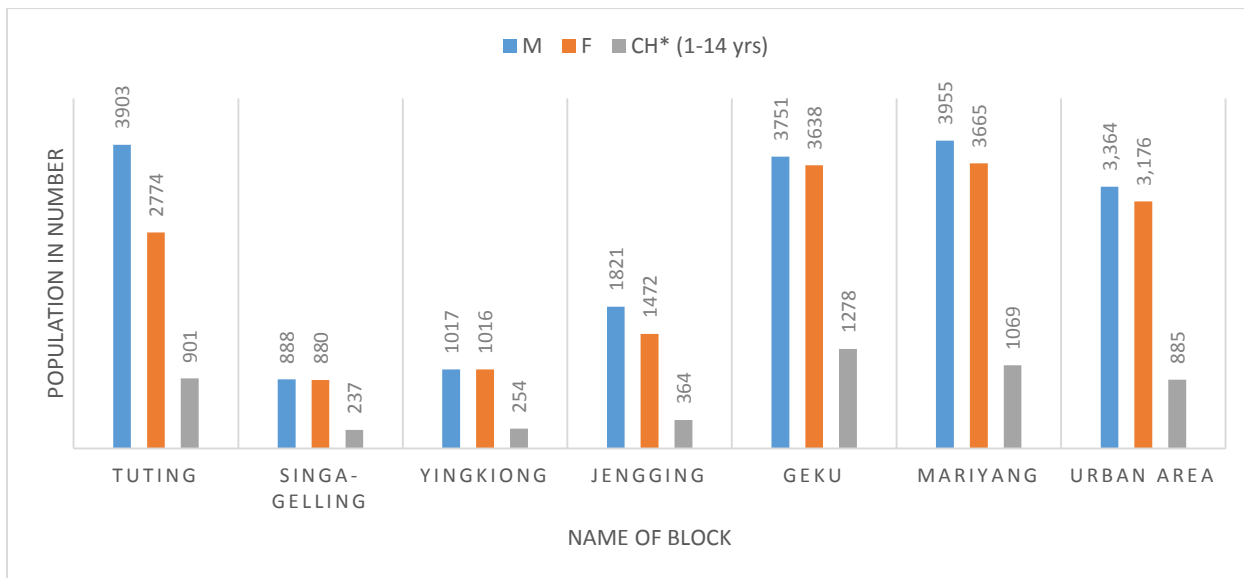


Figure 1.1 Number of male (M), female (F) and children (CH) in Block of Upper Siang

Total number of household in the district are 7324 out of which 1427 are in Geku Block and 1595 are in urban areas of the block. The total number of ST families in the district are 5703.

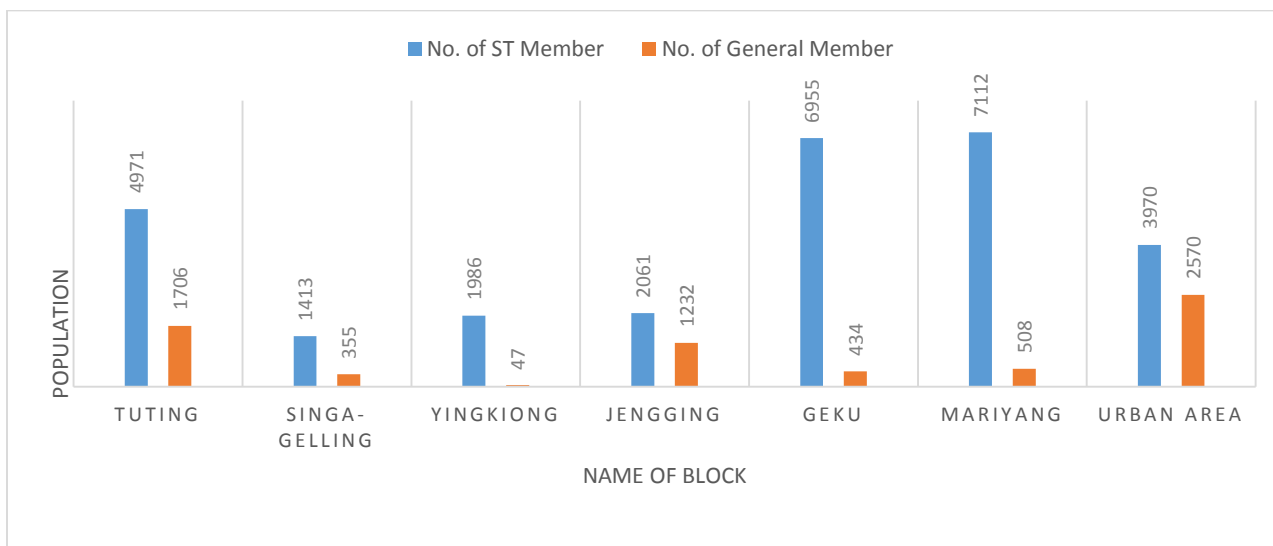


Figure 1.2 Number of SC, ST and General Families in Block of Upper Siang

1.3 Biomass and Livestock

Animal Husbandry and Dairying have played a vital role in the development of Arunachal Pradesh's rural economy. According to 19th Livestock Census 2012, the district has a total livestock population of 146635.

As per the latest census (2012), the district has a total of 45 crossbred cows, 17336 indigenous cows and 20891 pigs.

Table 1.4 Livestock Population

Name of the District	Small Animals				Large Animal		Draft Animal (Buffalo/ yak/ bulls/ any other)	Total
	Poultry	Ducks	Pigs	Goats	Indigenous Cow	Hybrid Cow		
Upper Siang	85789	8969	20891	7690	17336	45	5915	146635

Source: 19th Livestock Census 2012

1.4 Agro-Ecology, Climate, Hydrology and Topography

Climate and Rainfall: Climate in the district is varied as rainfall and temperature differs from place to place. The district experiences temperate and sub-tropical humid set of climatic condition with maximum and minimum temperature recorded in the months of June and December respectively. Maximum and Minimum temperature in the tract during summer and winter vary between 130c -390c and 40c to 210c while relative humidity in the area varies from 75 to 91% as envisaged from the records contiguous Upper Subansiri district. The minimum temperature during winter at many places generally goes down below freezing point. Remote localities in the district experience snow fall. The higher reaches in the north remains snow clad. The total snow cover in the District is on the wane due to the global warming phenomena and consequent retreat of glacier. Rainfall mainly occurs during the period of April to October. Average annual rainfall at Yingkiong was recorded as 3240mm (2002-2005).

1.5 Soil Profile

The soils of Upper siang district is mainly loam soil. Their water holding capacity varies with clay content. These soils crack on drying and have poor drainage characteristics. These are moderate in nitrogen, low to medium in phosphoric acid and high in potash content. These soils are normally medium in fertility.

Soils of the district have been derived from the country rocks of schists, gneisses in hilly areas

and form alluvial and colluvial materials in the valleys. The soils in the valley areas are sandy loam in texture with high acidic content. The pH values range from 5 to 6. The carbon content is high with medium to low phosphorous and potassium concentrations.

Table 1.5 Soil Profile of District

Name of Block	Soil Type		Land Slope			
	Major Soil Classes	Area (ha)	0-3% (ha)	3-8% (ha)	8-25% (ha)	>25% (ha)
Yingkiong	Loam soil	3215	804	1608	482	322
Jengging	Loam soil	4268	1067	2134	640	427
Geku	Loam soil	4393	1098	2197	659	439
Mariyang	Loam soil	3169	792	1585	475	317
Tuting	Loam soil	1942	486	777	291	194
Singa - Galling	Loam soil	353	88	177	53	35
Grand Total		17340	4335	8478	2600	1734

Source: Agriculture Department

1.6 Soil Erosion and Runoff Status

Data was not available.

1.7 Land Use Pattern

The total geographical area (TGA) of Upper Siang is 618800 hectare. The largest Block of the district is Tuting which comprises of a TGA of 16522 hectare i.e. about 17.55% of the TGA of the district.

Table 1.6 Land use Pattern in Ha

Name of the Blocks	TGA	Area under Agriculture				CI (%)	Area under Horticulture & Other Plantation Crops (Ha)	Area under Forest (Ha)	Area Under Wasteland	Area under other uses
		CCA	GCA(1)	NSA (2)	AST (1-2)					
Yingkiong	63736	3216	2107	1713.7	393.3	122.95	319	45889.92	953	13358.08
Jengging	68068	4271	1833.1	1596.68	236.42	114.81	613	53093.04	1140	8950.96
Geku	99008	4403	2345.98	2069.54	965	137.2	812	76236.16	1360	16196.84
Mariyang	86632	3169	2357.6	2053.88	672	137.65	606	63241.36	1270	18345.64
Tuting	165220	1983	1362.9	1062.3	388	137	330	130523.8	824	31559.2

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Singa - Gallin	136136	353	185.35	137.85	47.5	134.46	204	110270.16	171	25137.84
Grand Total	618800	17395	10191.93	8633.95	2702.22		2884	479254.44	5718	113548.6

Source: Agriculture Department

TGA- Total Geographical Area, CCA- Cultural Command Area, GCA- Gross Cropped Area, NSA- Net Sown Area, AST- Area Sown more than once, CI- Cropping Intensity

The Gross Cropped Area of the district is 10191.9 hectare out of which 2357.6 hectare i.e. 23% of the area falls in Mariyang. Geku Block records for maximum net sown area of 2069.54 hectare. The cropping intensity in Mariyang is 137.65% which is highest in the district followed by Geku (137.2%) and Singa-Gallin (134%). Upper Siang is having 479254.44 ha under forest.

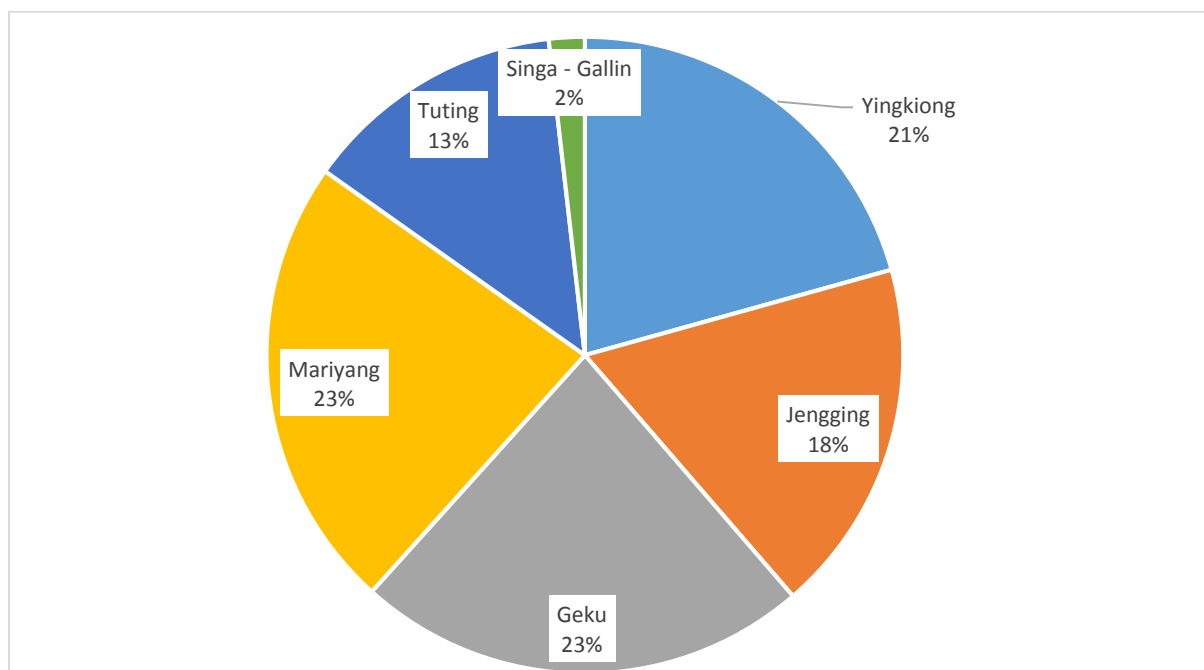


Figure 1.3 Block wise gross crop area in Upper Siang

Chapter 2 : District Water profile

2.1 Area Wise, Crop Wise Irrigation Status

Cereals are the major crop among agricultural crops of the district. The area under cereals cultivation during 2015-16 was 5604.32 hectare which was around 55% of the total area under agricultural crops. Kharif is the main crop season for agricultural crops. Out of total 10191.93 hectare area under agriculture, 8633.95 hectare was cultivated during Kharif while 1557.98 hectare was cultivated during Rabi.

Table 2.1 Crop wise status of irrigated and rainfed area in Upper Siang District

Crop Type	Kharif			Rabi			Total		
	Irrigated	Rainfed	Total	Irrigated	Rainfed	Total	Irrigated	Rainfed	Total
A) Cereals	1854.5	3749.82	5604.32	0	0	0	1854.5	3749.82	5604.32
B) Coarse Cereals	0	2281.13	2281.13	0	562.75	562.75	0	2843.88	2843.88
C) Pulses	0	0	0	0	468	468	0	468	468
D) Oil Seeds	0	184	184	0	0	0	0	184	184
E) Fibre	0	0	0	0	0	0	0	0	0
F) Any other crops	0	564.5	564.5	0	527.23	527.23	0	1091.73	1091.73
Grand Total	1854.5	6779.45	8633.95	0	1557.98	1557.98	1854.5	8337.43	10191.93

Source: Agriculture Department

In Upper Siang, 1854.51 hectare is irrigated. Out of 1854.51 hectare of irrigated land, the cereals crops are cultivated in 1854.51 hectare in Kharif.

Area under Horticulture & Plantation Crops is 1254.5 hectare for all the blocks.

2.2 Production and Productivity of Major Crops

Data was not provided by the concern department.

2.3 Irrigation Based Classification

The gross and net irrigated area in the district have been 1854.5 and 1854.5 hectares respectively. The total rainfed area in the district is 9555 hectare.

Table 2.2 Irrigation Based Classification

Block	Irrigated (Area in ha)		Irrigation Intensity	Rainfed (Area in ha)	
	Gross Irrigated Area	Net Irrigated Area		Partially Irrigated/Protective	Un-Irrigated or Totally
				Irrigation	Rainfed
Yingkiong	575.92	575.92	100.00%	242	1373
Jengging	454.08	454.08	100.00%	262	1482
Geku	362.74	362.74	100.00%	562	3186
Mariyang	325.56	325.56	100.00%	309	1751
Tuting	120	120	100.00%	56	1487
Singa-Gelling	16.2	16.2	100.00%	49	276
Grand Total	1854.5	1854.5		1480	9555

Source: Agriculture Department

*Chapter 3 : Water Availability in Upper Siang***3.1 Status of water availability**

Surface irrigation in the district is found to be common during all seasons. The total water available in summer is more than Rabi and Kharif. Most of the area is irrigated through Surface Irrigation system.

The district has many perennial rivers. The district is endowed with natural resources and ground and surface water are also available for agriculture.

Table 3.1 Status of water availability (in MCM)

S.No.	Block	Sources	Kharif	Rabi	Summer	Total in MCM
1	Yingkiong	Surface Irrigation	17	3.6	2.1	22.7
2	Jengging	Surface Irrigation	30	6.4	3.7	40.1
3	Geku	Surface Irrigation	15.4	3.3	1.9	20.6
4	Mariyang	Surface Irrigation	22.2	4.8	2.8	29.8
5	Tuting	Surface Irrigation	18.3	3.9	2.3	24.5
6	Singa Galling	Surface Irrigation	37.5	8	4.7	50.2
	Grand Total		140.4	30	17.5	187.9

Source: WRD

Geomorphology and soil types:

The district constitutes principally a hilly terrain covered by thick forests. The hill ranges are generally having moderate to steep slopes and narrow valleys and it occupies the lesser and inner Himalayan zones of the Great Himalayan Range. The hills are separated by the Siang River and its tributaries which flow mostly towards south and have deep gorges. The hills are comparatively higher in the northern side than the southern parts. The elevation, in general varies from 1,100 to more than 4000m above mean sea level. The elevation at the District Headquarters Yingkiong is 500m above mean sea level.

Physiographically the district can be broadly subdivided into two divisions 1. Hilly terrain, underlain by Proterozoic gneisses and schists with subordinate quartzite and phyllite, volcanics,

Gondwanas and Tertiary sedimentaries etc and 2. Very limited alluvial deposits in the valley fill. Majority of the district area is occupied by hills underlain by gneisses, Schists, volcanics, Gondwanas and Tertiary sedimentaries barring the highly restricted valley fills along Siang River.

Siang River, originated from Tibet and its tributaries form the main drainage system of the district. It flows in almost N-S direction. The drainage pattern is dendritic to subparallel and follow the general geomorphological trend of the hills and structural lineaments.

Based upon the geomorphic elements such as relief, drainage, lithology etc. the district has been divided into two major units namely denudo-structural hills and valley fill areas.

i) Denudo-structural hills are covering major parts of the district and composed of Phyllites, quartzites, biotite gneiss and Gondwana sedimentary formations. The denudation processes were earlier active in the hills and remnants of original structural features like long faults, deep facets, and strike trends could be seen in the formations.

ii) Valley fills:

Valley fills comprise thin veneer of alluvial deposits occurring along the Siang rivers in the form of terrace. The valleys range in altitude from 500-550m above mean sea level.

Soils of the district have been derived from the country rocks of schists, gneisses in hilly areas and form alluvial and colluvial materials in the valleys. The soils in the valley areas are sandy loam in texture with high acidic content. The pH values range from 5 to 6. The carbon content is high with medium to low phosphorous and potassium concentrations.

3.2 Status of Ground Water Availability

Groundwater is available in all geological formations in the district depending upon their primary or secondary porosities, geomorphologic and hydrogeologic set up.

GEC'97 (Ground Water Estimation Committee) couldn't adopt as the district area was more than 20% slope. Net annual Ground Water Draft is not available.

Geology and Hydrogeology: The district is underlain by rock formations of Recent to Precambrian age. The Precambrian rocks comprise high grade gneisses and Schists of Sela Group, followed by quartzite, phyllite, conglomerate, Shales, Biotite gneiss, Calc and Graphite Schist of Bomdila Group and Miri quartzite, Shale and conglomerates belonging to Miri Formations of Lr Gondwana Group and Abor volcanics of Paleozoic epoch and Tertiary sedimentaries comprising Geku and Dalbuing formations of Yingkiang Group. The Sela Group

of rocks of Precambrian age consists of high grade gneisses, lit-per-lit gneisses and schists. It occurs in the west and north-western part of the district. Bomdila Group of rocks representing low to medium grade metasediments comprising quartzites, mafic meta volcanics and carbonates, associated with ortho-gneisses, granites and mafic intrusive. The overlying Miri formations (Gondwana) of lower Paleozoic age constitutes mainly quartzite with shale and phyllite association occur along a N-S trending patch inside the Bomdila Group of rock. The Miri formation is having tectonic contact with the underlying Bomdila Group of rocks. Paleozoic Abor volcanics representing basaltic flows with fossiliferous intertrappean shale and sandstone are rimming around the Tertiary Yingkiong Group representing Shale, sandstone with welded tuff and mafic volcanics of Geku formation and Foraminiferal limestone and shale of Dalbuing formation.

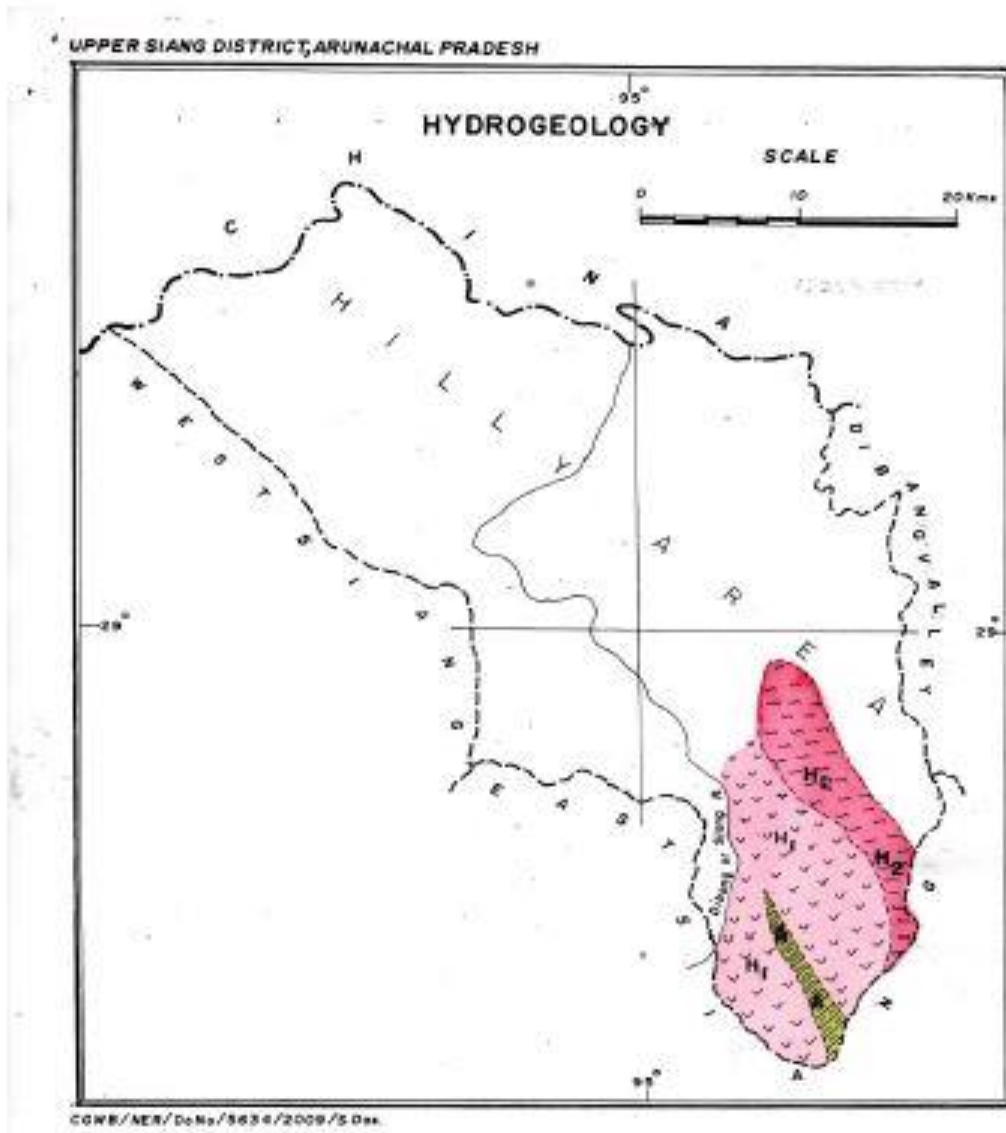
Hydro geologically the area incorporated in the district can be broadly subdivided into two units

1. Consolidated and Semi-consolidated formations 2. Unconsolidated formations

Consolidated and Semi-consolidated Formations: These formations are underlain in the areas covered by the hills and mountains and occupy the lions share of the area which is about 99% of the total geographical area of the district. The hills are constituted by phyllite, gneisses, quartzite and Calc gneiss comprising the crystalline consolidated formations representing Sela Group and Bomdila Group. Abor Volcanics and the volcanics in Geku Formations are also representing the consolidated formations. The Semiconsolidated formations represent Gondwana sedimentaries comprising ortho-quartzite, Shale and the sedimentaries of Yingkiong Group and the Dalbuing formations. These rocks are highly jointed and fractured with high degree of weathering. Ground water occurs in weathered zone as also in the fractured zones which form the zones of secondary porosity in these formations. Since there is no ground water development structures tapping all these water yielding horizons in the form of dugwells, dug-cum-bore wells or bore wells, ground water is discharged in the topographic lows in the form of springs. Rainfall forms the main source of recharge which gets recharged through the weathered mantle and finally reaches the fractures and openings through percolation. Because of high and steep slopes of the hill surfaces good amount of rainwater flows down as surface run-off while a meager portion of precipitation seeps inside to vitalize the shallow weathered and deeper fractured horizons in the consolidated formations.

Unconsolidated formations: These formations comprise sand of various textures, silt, clay and pebbles with boulders occurring in the limited valley areas along Siang River. These occur as terraces along the rivers. An average thickness of 3-4m of alluvial veneer could be seen in the valleys while average thickness of weathering in the underlain consolidated formations may vary from 5-10m as estimated during the studies carried out by CGWB. These valley areas could be fully developed through portable DTH-Percussion combined rig for augmentation of water supply and irrigation. (*Source: CGWB Reort of Upper Siang*)

Ground water resources: The dynamic ground water resources of the districts of Arunachal Pradesh was estimated by the Central ground water Board based upon the ground water resources estimation methodology of 1997 and it was published for the assessment year of 2004. In the report the dynamic ground water resources potential of Upper Siang has not been shown as it could not be estimated due to paucity of data required for ground water resources estimation.



Map 2: Hydrology Map of District

3.3 Status of Command Area

A total of 15655.5 hectare is covered under canal command. Maximum area is covered in Geku Block (3962.7 ha) followed by Jengging block (3843.9 ha) and Yingkiong Block (2894.4 ha).

Table 3.2 Status of Command Area

S.No.	Name of the Block	Information of Canal Command			Information on the other Services Command (Micro Irrigation)			Total Area in Ha	
		TA	DA	UDA	TA	DA	UDA	Developed Command	Undeveloped Command
1	Yingkiong	2894.4	1221.4	1673	312	294	18	1515.4	1691
2	Jengging	3843.9	2460.9	1383	422	399	23	2859.9	1406
3	Geku	3962.7	1380.7	2582	437	417	20	1797.7	2602
4	Mariyang	2852.1	1236.1	1616	317	287	30	1523.1	1646
5	Tuting	1784.7	701.7	1083	190	174	16	875.7	1099
6	Singa - Galling	317.7	97.7	220	34	32	2	129.7	222
	Grand Total	15655.5	7098.5	8557	1712	1603	109	8701.5	8666

Source: WRD

*TA- Total Area, DA- Developed Area, UDA- Undeveloped Area

3.4 Existing Type of Irrigation

In total, 6204 hectare of command area is irrigated under surface irrigation. Total command area under canal based irrigation is 5596 hectare under government canal while 608 hectare of area is under Community/Pvt Canal. Jengging Block has highest area i.e. 2475 hectare under canal irrigation while Yingkiong block has 1435 hectare area under canal irrigation. While Singa – Galling block has least area i.e. 28 hectare irrigated by canals.

Table 3.3 Existing type of Irrigation

Block	Source of Irrigation	Surface Irrigation			Total Irrigation Sources
		Canal Based		Tanks / Ponds / Reservoirs	
		Govt Canal	Community/Pvt Canal	Community Ponds	
Yingkiong	No	56	26	0	82
	Command Area	1166	269	0	1435

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Jengging	No	70	14	0	84
	Command Area	2349	126	0	2475
Geku	No	21	8	0	29
	Command Area	738	65	0	803
Mariyang	No	34	6	0	40
	Command Area	1012	148	0	1160
Tuting	No	13	0	0	13
	Command Area	303	0	0	303
Singa - Galling	No	3	0	0	3
	Command Area	28	0	0	28
Grand Total	No	197	54	0	251
	Command Area	5596	608	0	6204

Source: WRD

4. Chapter: Water Requirement /Demand

The earlier Chapters deal with the general profile, water profile and water availability of Upper Siang district. The present chapter deals with the current (2016) and projected (2020) demand of water for various sectors. The demand for water has been assessed on the basis of data obtained from different departments.

4.1 Domestic Water Demand

Data of Census 2011 and 2001 has been considered to arrive at the growth rate of population of the district. As per Census 2011, the district has shown an annual growth rate of 0.59%. Table 4.1 below indicates the Block-wise population of the district. Current population (in 2016) has been calculated by assuming a growth rate of 2.95% ($0.59\% \times 5$ Years) over a period of five years (from 2011-2016). Projected population has been calculated in similar way by assuming a growth rate of 2.36% ($0.59\% \times 4$ Years) over the period of four years (from 2016-2020).

Table 4.1 Domestic Water Demand (MCM)

Block	Population in 2011	Population in 2016	Projected population in 2020	Gross Water Demand in 2016	Gross Water Demand in 2020
Tuting	6677	6874	7032	0.35	0.36
Singa-Gelling	1768	1820	1862	0.09	0.10
Yingkiong	2033	2093	2141	0.11	0.11
Jengging	3293	3390	3468	0.17	0.18
Geku	7389	7607	7781	0.39	0.40
Mariyang	7620	7845	8025	0.40	0.41
Urban Area	6540	6733	6887	0.34	0.35
Grand Total	35320	36362	37195	1.86	1.90

It can be inferred from the table that considering the growth rate of population of the district, the quantity of water required in 2020 for domestic consumption shall be approximately 1.90 MCM which is 0.04 MCM more than the present water requirement.

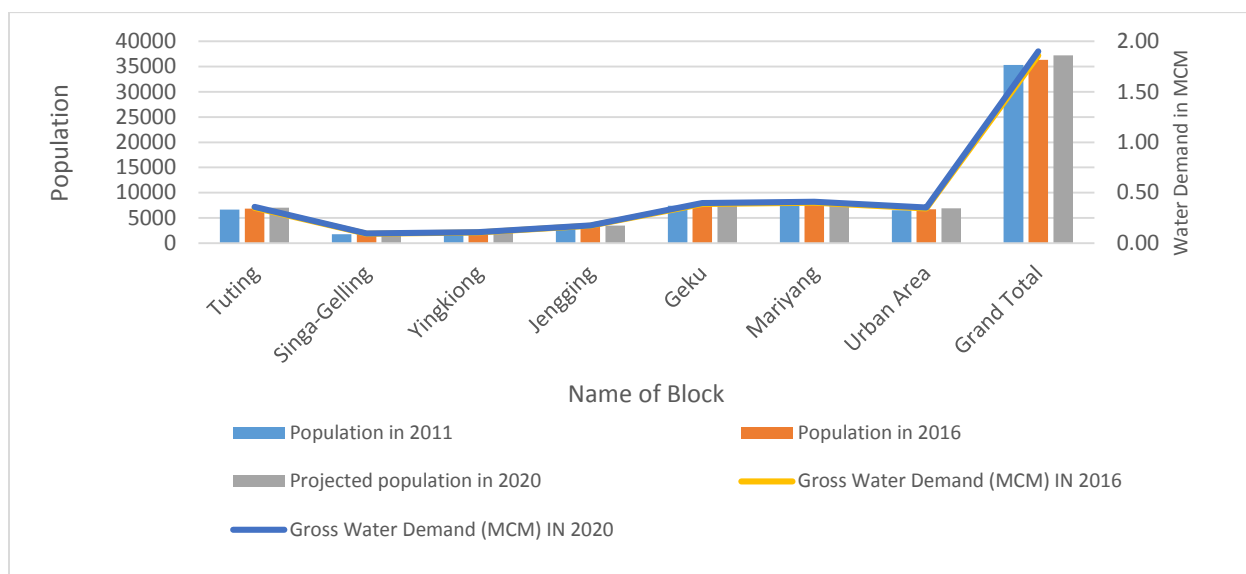


Figure 4.1 Population and domestic water requirement

It has been assumed that per capita daily water requirement of people residing in urban areas of the district is 140 Litres and for population in rural areas, the daily per capita daily water requirement is 100 Litres. Using the same norms domestic water supply demand has been worked out and given in table 20 below.

4.2 Crop Water Requirement

Taking into account, the water requirement of various crops, average water requirement per hectare of land has been worked out to for each crops separately. The irrigation efficiency of water has also been considered while working out the water requirement. It has been observed that most of the field is irrigated under flood irrigation system where the efficiency of water is around 50%. Accordingly, to calculate the actual water requirement of land, twice of the crop water requirement have been taken.

Table 4.2 Crop Water Requirement in Million Cubic Meter

SI No	Block	Area Sown (Ha)	Irrigated area (ha)	Crop Water Demand	Water Potential required	Existing Water Potential	Water potential to be created
1	Yingkiong	2107	575.92	63.21	63.21	17.28	45.93
2	Jengging	1833.1	454.08	54.99	54.99	13.62	41.37
3	Geku	2345.98	362.74	70.38	70.38	10.88	59.50
4	Mariyang	2357.6	325.56	70.73	70.73	9.77	60.96
5	Tuting	1362.9	120	40.89	40.89	3.60	37.29

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6	Singa - Galling	185.35	16.2	5.56	5.56	0.49	5.07
	Grand Total	10191.93	1854.5	305.76	305.76	55.64	250.12

It can be concluded from the table that in 9 blocks, a total water potential of 250.12 MCM is to be met additionally in the district to fulfill the requirement of crops.

4.3 Livestock

The requirement of water for livestock of the district has been derived from last two livestock census (2007 & 2012). The table below represents the Block wise water requirement as well as total water requirement of the district for livestock.

Table 4.3 Livestock water Demand in MCM

Name of the District	Total number of livestock	Present water demand (MCM)	Water Demand in 2020 (MCM)	Existing water potential (MCM)	Water potential to be created (MCM)
Upper Siang	146635	2.14	3.64	2.14	1.50

4.4 Industrial Water Requirement

Industrial water demand is zero because there is no industry in Upper Siang district.

Table 4.4 Industrial Water Requirement in MCM

Name of the Blocks	Name of the Industry	Water Demand	Water Demand in 2020	Existing Water Potential	Water Potential to be created
Yingkiong	No industry	0	0	0	0
Mariyang	No industry	0	0	0	0
Geku	No industry	0	0	0	0
Jengging	No industry	0	0	0	0
Tuting	No industry	0	0	0	0
Singha - Galling	No industry	0	0	0	0
Grand Total		0	0	0	0

4.5 Water Demand for Power Generation

Total water demand for power generation in Upper Siang district is 0 MCM.

Table 4.5 Water Demand for Power Generation

Name of the Blocks	Power Requirement (MW)	Water Demand (MCM)	Water Demand in 2020 (MCM)	Existing Water Potential (MCM)	Water Potential to be created (MCM)
Yingkiong	0	0	0	0	0
Mariyang	0	0	0	0	0
Geku	0	0	0	0	0
Jengging	0	0	0	0	0
Tuting	0	0	0	0	0
Singha - Galling	0	0	0	0	0
Grand Total	0	0	0	0	0

4.6 Total Water Demand of the district for various sectors

This sections presents the total water demand of the district and has been calculated by summing up all major sectors consuming water. The current water demand has been indicated in Table 4-6 and the projected water demand has been depicted in Table 4-7.

Table 4.6 Total Water Demand in MCM of the district for various sectors at Present

Name of Block	Demand from components (MCM)					Total (MCM)
	Domestic	Crop	Livestock	Industrial	Power Generation	
Tuting	0.35	40.89		0	0	41.24
Singa-Gelling	0.09	5.56		0	0	5.65
Yingkiong	0.11	63.21		0	0	63.32
Jengging	0.17	54.99		0	0	55.17
Geku	0.39	70.38		0	0	70.77
Mariyang	0.74	70.73		0	0	71.47
Grand Total	1.86	305.76	2.14	0	0	309.76

The present water demand of the district has been assessed at 309.76 MCM annually, with Mariyang being the Block with maximum water requirement (71.47 MCM). Geku and Yingkiong block stand at 2nd and 3rd position with 70.77 MCM and 63.32 MCM water required in the respective Block.

Table 4.7 Total Water Demand of the district for various sectors (Projected for 2020)

Name of Bloks	Demand from components (MCM)					Total (MCM)
	Domestic	Crop	Livestock	Industrial	Power Generation	
Tuting	0.36	40.89				41.25
Singa-Gelling	0.10	5.56				5.66
Yingkiong	0.11	63.21				63.32

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Jengging	0.18	54.99				55.17
Geku	0.40	70.38				70.78
Mariyang	0.76	70.73				71.49
Grand Total	1.90	305.76	3.64	0.00	0.00	311.30

During 2020, total water requirement of the district has been assessed at 311.30 MCM out of which maximum will be for Mariyang (71.49 MCM). It will be followed by Geku Block (70.78 MCM) and Yingkiong (63.32 MCM).

4.7 Water Budget

The total water gap for the district has been estimated at 119.75 MCM at present and 119.79 MCM during 2020 which indicates that the district is consuming more water than available water. However, in Singa Galling block, there is a negative gap (surplus) of 44.51 and 44.51 MCM in present which is a good condition.

Table 4.8 Water Budget (Volume in MCM)

Name of Block	Existing water availability (MCM)		Total (MCM)	Water Demand (MCM)		Water Gap (MCM)	
	Surface Water	Ground Water		Present	Projected (2020)	Present	Projected (2020)
Yingkiong	22.73	0	22.73	63.32	63.32	40.59	40.59
Jengging	40.16	0	40.16	55.17	55.17	15.01	15.01
Geku	20.64	0	20.64	70.77	70.78	50.13	50.14
Mariyang	29.71	0	29.71	71.47	71.49	41.76	41.78
Tuting	24.47	0	24.47	41.24	41.25	16.77	16.78
Singa - Galling	50.16	0	50.16	5.65	5.66	-44.51	-44.51
Grand Total	187.87	0	187.87	309.76	311.30	119.75	119.79

Chapter 5. Strategic Action Plan for Irrigation in District under PMKSY

Water is essential for sustaining life and at the same time, it is an important component for almost all developmental plans. Obviously the schemes for development of water resources for beneficial use of the society have been taken up since the time immemorial. Considerable progress has been made in respect of water resources development in India after independence through various Plans and such developments have helped in almost fivefold increase in creation of irrigation potential. There has also been appreciable development in the areas of drinking water supply and other uses. However, growing population, urbanization and industrialization has led to considerable increase in demand of water for various purposes e.g., irrigation, domestic needs, industrial requirements etc.

In this regard, it may be mentioned that the water sector has very strong linkages with other developmental activities. In view of fast changing development scenario, it is emphasized that the key priorities and identified strategies cannot be considered as static and firm. These need to be reviewed and improved upon from time to time. In this regard a comprehensive “Strategic Plan for District Irrigation” has been prepared through geospatial approach:

Methodology

Diverse research methodologies using RS and GIS have been applied by different authors to identify potential rainwater harvestings in remote and data scarce areas; in most of these methods, thematic maps are derived from remote sensing data and integrated in GIS to evaluate suitable sites for rainwater harvesting. Remote sensing is of immense use for natural resources mapping and generating necessary spatial database required as an input for GIS analysis. GIS is a tool for collecting, storing and analysing spatial and non - spatial data, and developing a model based on local factors can be used to evaluate appropriate natural resources development and management action plans. Both these techniques can complement each other to be used as an effective tool for selecting suitable sites for water harvesting structures.

In assessment of proposed rainwater harvesting structures potential using GIS and RS, outlines six key factors that require to be integrated into a GIS framework in order to successfully develop a suitable model for RWH. This include; rainfall, hydrology (rainfall runoff relationships), slope, land cover, soils (texture, structure, depth) and socio-economics of the area under consideration.

5.1 Cost Norm

1. Water Resources Department

A) Surface minor irrigation (MI) schemes : The cost norms have been applied as per the MODIFIED GUIDELINES FOR THE ACCELERATED IRRIGATION BENEFITS PROGRAMME (AIBP) EFFECTIVE FROM OCTOBER 2013, Govt of India , for Surface minor irrigation (MI) schemes of Special category states -North-Eastern states, Hilly states (Himachal Pradesh, Jammu and Kashmir and Uttarakhand) and drought prone undivided Koraput, Bolangir and Kalahandi (KBK) districts of Odisha have been applied while estimating the project cost . The development cost per hectare of CCA of individual scheme is less than Rs.2.50 lakh.

B) CAD & WM Programme: The cost norms of CAD & WM programme proposed under Har Khet Ko Pani have been adopted as per the Annexure -I of Revised Interim Guidelines of Command Area Development and Water Management (CAD&WM) Programme Govt of India issued vide letter No - G-11012/3/2013-CADWM dated 17th September, 2015 (copy enclosed). the activity wise rates adopted in CAD & W M component are as follows:

- (i) Survey, Planning and designing of OFD Work - Rs 1200/- per Ha
- (ii) Lined channels /underground pipelines. Rs 45000/- per Ha
- (iii) Mechanised land leveling in the hilly/difficult areas Rs 50000/- per Ha
- (iv) Micro- irrigation Rs 50000/- per Ha
- (v) Construction of Field, intermediate and link drains Rs 6000/- per Ha
- (vi) Correction of System Difficiency Rs 8000/- per Ha
- (vii) Onetime grant to registered WUAs Rs 1200/- Ha

C) Repair, restoration and renovation of defunct water sources / Water Bodies: The cost norms of RRR work proposed under Har Khet Ko Pani have been adopted Rs 45000/- per Ha of CCA as per approved guide lines of Govt of India.

2. Cost Norm by Agriculture Department

1. Non-DPAP Sprikler: The cost norms of Sprinkler system proposed under Per Drop More Crop have been adopted Rs 450000/- per Ha of CCA.

2. Secondary storage structure of 1200 cu.m: The cost norms of Secondary storage structure of 1200 cum proposed under Per Drop More Crop have been adopted Rs 250000/- per Ha of CCA.

3. On Farm development (distribution of pipe/raised bed and furrow: The cost norms of On Farm development (distribution of pipe/raised bed and furrow proposed under Per Drop More Crop have been adopted Rs 150000/- per Ha of CCA.

4. Training to farmers: The cost norms of Training to farmers proposed under Per Drop More Crop have been adopted Rs 24000/- per Unit.

5.2 Department Wise Plan

Total plan of Upper Siang district for five years works out to be **Rs. 78270.95 lakh** (Table 5-1). Maximum share of Rs. 60358.31 lakh (77%) is for WRD followed by Agriculture department with Rs. 8896.94 lakh (11%). Share of Horticulture and Rural Development (DRDA) department Rs. 595.20 lakh (1%) and Rs. 8420.50 lakh (11%) respectively. Fig.5-1 indicates department-wise share in PMKSY for five years from 2015-16 to 2019-20.

Table 5.1: Department-wise year-wise proposal under PMKSY in Rs. Lakhs

Name of Department	2015-16	2016-17	2017-18	2018-19	2019-20	Grand Total
Agriculture Department	0	1464.14	2942.62	2814.36	1675.82	8896.94
Horticulture	0	148.8	148.8	148.8	148.80	595.2
Water Resources Department	677.13	19024.59	17146.5	15844.92	7665.17	60358.31
Rural Development (DRDA)	1684.10	1684.10	1684.10	1684.10	1684.10	8420.50
Grand Total	2361.23	22321.63	21922.02	20492.18	11173.89	78270.95

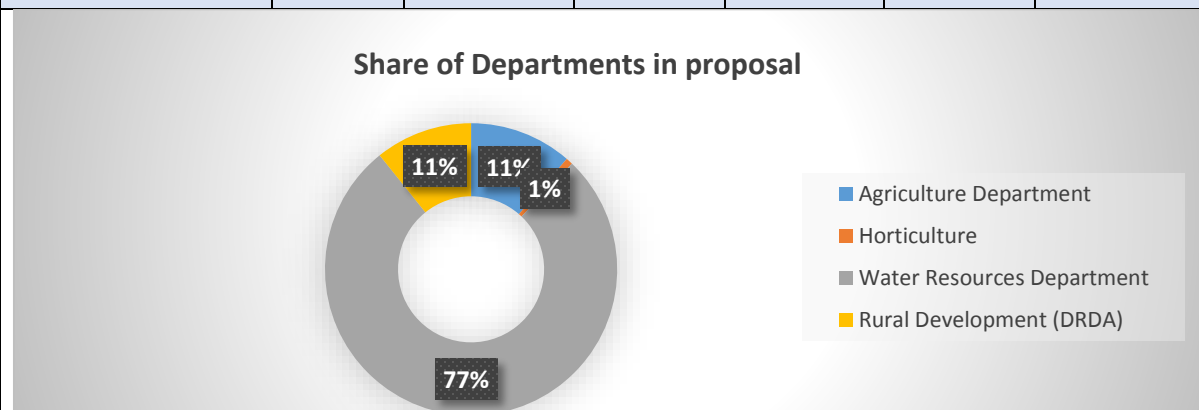


Figure 5.1 Department-Wise Share

5.3 Component Wise Plan

As discussed above about various components of PMKSY, the plan is prepared accordingly. Table 5-2 shows component wise plan for 5 years starting from 2015-16 to 2019-20. AIBP there are no any proposal under this component. Per Drop More Crop components is Rs. 9492.14 lakh, which is to be executed mainly by Agriculture and Horticulture department. This component constitutes 12% of the PMKSY Plan. Har Khet ko Pani component is of Rs. 60358.31 lakh (77%) will be executed by WRD. Watershed component has a total proposal of Rs. 8420.50 lakh which is 11% of district’s PMKSY proposal. This component will be implemented by rural development (DRDA). Fig. 5-2 represents the graphical representation of various components of PMKSY, year wise plan and share

Table 5.2: Component wise plan in Rs. Lakhs

Component	2015-16	2016-17	2017-18	2018-19	2019-20	Grand Total
AIBP	0	0	0	0	0	0.00
HKKP	677.13	19024.59	17146.5	15844.92	7665.17	60358.31
PDMC	0	1612.94	3091.42	2963.16	1824.62	9492.14
PMKSY - Watershed	1684.10	1684.10	1684.10	1684.10	1684.10	8420.50
Grand Total	2361.23	22321.63	21922.02	20492.18	11173.89	78270.95

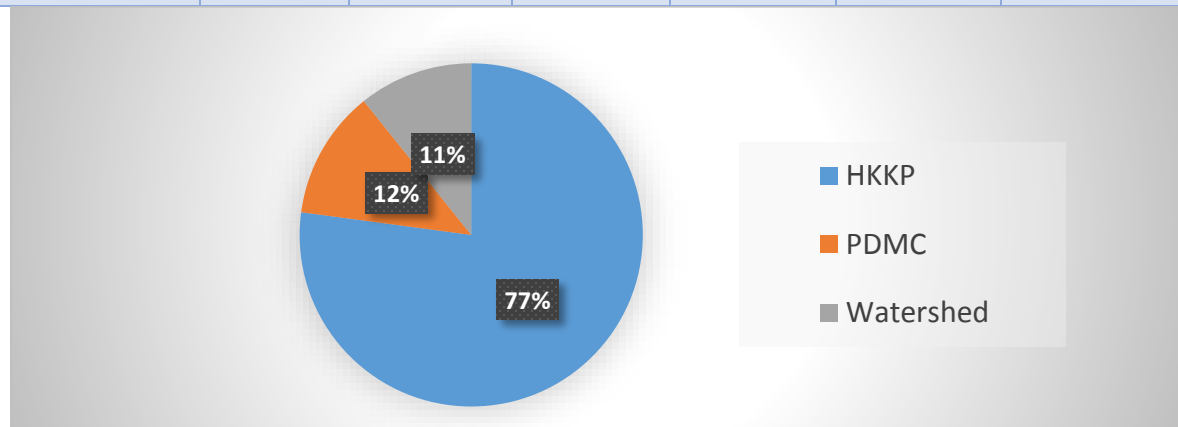


Figure 5.2 Component-Wise Share

5.1 Programme Components

The activities of Water Resources Department will be as follows:

1. Accelerated Irrigation Benefit Programme (AIBP): Since there is no any ongoing Major and medium irrigation or any national project of irrigation sector. Hence there are no any proposal under this component.

2. Har Khet ko Pani

a) Creation of new water sources through Minor Irrigation (both surface and groundwater): There is proposal to bring 10968 Ha land under assured irrigation (Har Khet Ko Pani) by creating 242 Nos new surface minor irrigation schemes with a financial outlay of Rs 27420.00 Lakh. Further an area of 70 Ha is proposed to be brought under Ground Water Development with 16 Nos proposed Schemes.

b) Repair, restoration and renovation of defunct water sources: 251 Nos existing surface Minor Irrigation projects / schemes which are either defunct or not functioning properly covering 6204 Ha C C A with a financial outlay Rs 2791.80 Lakh are proposed for repair, restoration & Renovation work for strengthening the carrying capacity of these minor irrigation sources.

C) Repair, restoration and renovation of water bodies: 24 Nos Water bodies covering 14.30 Ha are to be renovated for strengthening the carrying capacity. with a financial outlay of Rs 6.44 Lakh.

d) Command area development: 496 MI Schemes (both new & Existing) covering an area of 17395 Ha are proposed under this sector with a financial outlay Rs 15516.70 Lakh for strengthening and creation of distribution network from source to the farm

3. Per Drop More Crop

a) 16 Nos Solar pump sets (Water lifting devices) are proposed with a financial outlay of Rs 84.85 Lakh are proposed.

b) 191 Nos schemes are proposed for sprinkler irrigation by Department of Agriculture to cover an area of 191 Ha with a financial outlay of Rs 859.50 Lakh.

c) 1760 Nos schemes are proposed for Secondary Storage Structure by Department of Agriculture to cover an area of 1760 Ha with a financial outlay of Rs 4400.00 Lakh.

d) 2392 Nos schemes are proposed for On Farm Development (distribution pipe / raised bed and furrow system etc.) by Department of Agriculture to cover an area of 2392 Ha with a financial outlay of Rs 3588.00 Lakh.

e) 206 units for Training to farmers by Department of Agriculture is proposed with a financial outlay of Rs 49.44 Lakh.

f) Proposed Fund by Horticulture department is Rs. 595.20 lakh.

4) Watershed (DRDA)

Watershed component has a total proposal of Rs. 8420.50 lakh which is 12% of district's PMKSY proposal. This component will be implemented by rural development (DRDA).

5.4 Suggestions

For successful implementation of PMKSY plan it is suggested that:

- All the stakeholders should convene meeting of Panchayat samities and then finalise the village plan and prepare DPR.
 - There should not be duplicity of project.
 - The Department should supplement each other so that the maximum irrigation efficiency is achieved.
 - All the irrigation projects should have a component of water conveyance so that the each drop of water is judiciously utilized.
 - Where ever feasible solar pumpsets should be installed.
 - All the structures planned should be geo tagged and marked on map, so that social monitoring of the projects can be conducted. This will also avoid the duplicity.
 - Priority should be given to projects minimize the gap in potential created and potential utilized.
 - Execution of the scheme should be expeditiously completed.
 - There should be smooth fund flow to timely complete the project.
-

Annexure I: Physical & Financial Phasing of Proposed Activity Wise Work Component (Har Khet Ko Pani) Under Pmksy By Water Resources Department Yingkiong

A. 1st Year: 2015 - 16 (Har Khet Ko Pani)

Name of Block	Sl No	Name of Scheme	C C A in Ha	Creation of new water sources		repair, restoration and renovation of defunct water sources		Command Area Development and Water Management (CAD&WM) Programme														G/Total	
				Surface Minor Irrigation		Renovation of Existing Surface MI Schemes		Survey, Planning and designing of OFD Works		Lined channels (a)		Mechanised land leveling (b)		Micro irrigation (c)		Construction of Field, intermediate and link drains (d)		Correction of System Difficulty (e)		Onetime grant to registered WUAs			Estt Cost @ 10% of a, b, c, d & e
				Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin		
Yingkiong	1	Cluster of MI schemes under Yingkiong -I.	59	59	206.50	0	0																206.50
	2	Cluster of MI Schemes at Yingkiong, Mariyang, Geku & Katan Circle under Yingkiong Sub Division	100		0	0	0.00	100	1.20	90	40.50	60	30.00	10	5.00	90	5.40	100	8.00	100	1.20	8.89	100.19
		Sub Total =	159	59	206.5	0	0	100	1.20	90	40.5	60	30	10	5.00	90	5.40	100	8.00	100	1.20	8.89	306.69
Jengging	3	Cluster of MI schemes under Jengging -I	34	34	119.00	0	0.00																119.00

	4	Cluster of MI Schemes of Jengging, Karko, Gossang, Moying, Ramsing, Bomdo and Janbo under Jengging Circle	51	0	0	0	0.00	51	0.61	46	20.70	25	12.50	5	2.50	46	2.76	51	4.08	51	0.61	4.25	48.01
		Sub Total =	85	34	119.00	0	0	51	0.612	46	20.70	25	12.50	5	2.50	46	2.76	51	4.08	51	0.612	4.25	167.01
Tuting	5	Cluster of MIP schemes at Tuting -I	37	37	129.50	0	0																129.50
	6	Cluster of MI Scheme under Tuting, Gelling, Singha, Migging and Palling circle	74	0	0.00	0	0	74	0.89	67	30.15	44	22.00	7	3.50	67	4.02	74	5.92	74	0.89	6.56	73.93
		Sub Total =	111	37	129.5	0	0	74	0.888	67	30.15	44	22.00	7	3.5	67	4.02	74	5.92	74	0.888	6.56	203.43
		G/Total =	355	130	455	0	0	225	2.7	203	91.35	129	64.5	22	11	203	12.18	225	18	225	2.7	19.7	677.13

B. 2nd Year: 2016 - 17 (Har Khet Ko Pani)

Name of Block		Name of Scheme	Command Area Development and Water Management (CAD&WM) Programme																								G/Total						
			C C A in Ha		Creation of new water sources		repair, restoration and renovation of defunct water sources		Surface Minor Irrigation		Renovation of Existing Surface MI Schemes		Survey, Planning and designing of OFD Works		Lined channels (a)		Mechanised land leveling (b)		Micro irrigation (c)		Construction of Field, intermediate and link drains (d)		Correction of System Deficiency (e)		Onetime grant to registered WUAs			Estt Cost @ 10% of a, b, c, d & e		RRR of Water Bodies		Other Activities	
			Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin		Phy	Fin	Phy	Fin		
Yingki ong	1	Sipan area MIC at Pugging village.	14	14	49.00	0	0	14.00	0.17	13	5.85	7	3.50	1	0.50	13	0.78	0	0.00	14	0.17	1.06											61.03
	2	Lobo area MIC at Pugging village.	10	0	0	10	7.5	10.00	0.12	9	4.05	3	1.50	1	0.50	9	0.54	10	0.80	10	0.12	0.74										15.87	
	3	C/O MIP from Sipun Nala for Loleng Agril Land at Pugging	10	0	0	10	7.5	10.00	0.12	9	4.05	5	2.50	1	0.50	9	0.54	10	0.80	10	0.12	0.84										16.97	
	4	MIP at Yombo nallah for Pering area at Pugging	141	141	493.50	0	0	141	1.69	127	57.15	106	53.00	14	7.00	127	7.62	0	0.00	141	1.69	12.48										634.13	
	5	Tuying area MIC at Pugging village.	3	0	0	3	2.25	3.00	0.04	3	1.35	1	0.50	0	0.00	3	0.18	3	0.24	3	0.04	0.23										4.82	
	6	MIP from Sipun nallah for Lollen	40	40	140.00	0	0	40.00	0.48	36	16.20	30	15.00	4	2.00	36	2.16	0	0.00	40	0.48	3.54										179.86	

41	C/o CC Lining for Upper and Lower siri area at Gossang	100	0	0	100	75	100.00	1.20	90	40.50	15	7.50	10	5.00	90	5.40	100	8.00	100	1.20	6.64	150.44
42	C/O CC lining from Sinyu nallah to Yoying area at Karko	10	0	0	10	7.5	10.00	0.12	9	4.05	2	1.00	1	0.50	9	0.54	10	0.80	10	0.12	0.69	15.32
43	C/O CC lining from Sisup Korong to lower Lidum at Karko	8	0	0	8	6	8.00	0.10	7	3.15	1	0.50	1	0.50	7	0.42	8	0.64	8	0.10	0.52	11.92
44	C/O CC lining from Sisup nallah to Kinying area at Karko	12	0	0	12	9	12.00	0.14	11	4.95	2	1.00	1	0.50	11	0.66	12	0.96	12	0.14	0.81	18.17
45	C/O CC lining from Sigong nallah to Gorak paddy field at Karko	8	0	0	8	6	8.00	0.10	7	3.15	1	0.50	1	0.50	7	0.42	8	0.64	8	0.10	0.52	11.92
46	MIP for Sitong area from sisup Nallah at Karko.	100	100	350.00	0	0	100	1.20	90	40.50	51	25.50	10	5.00	90	5.40	0	0.00	100	1.20	7.64	436.44
47	MIP for Yoying Nallah via Detu to Yoying area karko	4	0	0	4	3	4.00	0.05	4	1.80	1	0.50	0	0.00	4	0.24	4	0.32	4	0.05	0.29	6.25
48	MIP for Gurbung area from Sisup Nallah at Karko Village.	19	0	0	19	14.25	19.00	0.23	17	7.65	5	2.50	2	1.00	17	1.02	19	1.52	19	0.23	1.37	29.77
49	MIP for Sinyo to Yoying area from Sinyu Nalla Karko	3	0	0	3	2.25	3.00	0.04	3	1.35	1	0.50	0	0.00	3	0.18	3	0.24	3	0.04	0.23	4.82
50	C/O MIC for Kome WRC field at kinekibo village	20	0	0	20	15	20.00	0.24	18	8.10	3	1.50	2	1.00	18	1.08	20	1.60	20	0.24	1.33	30.09

60	Domiyang MIP at Gueng agri. field at Damro Gingkong Village	7	0	0	7	5.25	7.00	0.08	6	2.70	1	0.50	1	0.50	6	0.36	7	0.56	7	0.08	0.46					10.50
61	Morom MIP at Damro Gingkong Village	60	0	0	60	45	60.00	0.72	54	24.30	9	4.50	6	3.00	54	3.24	60	4.80	60	0.72	3.98					90.26
62	MIP for Koptung Area from Sibyung Stream at Boomi	35	35	122.50	0	0.00	35.00	0.42	32	14.40	28	14.00	3	1.50	32	1.92	0	0.00	35	0.42	3.18					158.34
63	MIP for Siggang Area from Siggang Stream at Milang Lanpong	51	51	178.50	0	0.00	51.00	0.61	46	20.70	41	20.50	5	2.50	46	2.76	0	0.00	51	0.61	4.65					230.83
64	Irrigation channel from Sipi river to Yunge-Sarol & Hala Romyang WRC field at Milang Lanpong.	374	374	1309.00	0	0	374	4.49	337	151.65	281	140.50	37	18.50	337	20.22	0	0.00	374	4.49	33.09					1681.94
65	MIC for Sika area of New Milang Langdum Langkong Village	3	3	10.50	0	0.00	3.00	0.04	3	1.35	2	1.00	0	0.00	3	0.18	0	0.00	3	0.04	0.25					13.35
66	MIP From Rokbung Korong to Tongkae Area of New Milang langdum Langkong	3	3	10.50	0	0.00	3.00	0.04	3	1.35	2	1.00	0	0.00	3	0.18	0	0.00	3	0.04	0.25					13.35
67	MIC from Hatnyi Korong to Nogo area at New Milang	6	6	21.00	0	0.00	6.00	0.07	5	2.25	5	2.50	1	0.50	5	0.30	0	0.00	6	0.07	0.56					27.25
68	MIP for yomyang Area from Sok stream at Peki Modi	48	0	0	48	36	48.00	0.58	43	19.35	10	5.00	5	2.50	43	2.58	48	3.84	48	0.58	3.33					73.75
69	MIP for Siyat area	140	140	490.00	0	0	140	1.68	126	56.70	105	52.50	14	7.00	126	7.56	0	0.00	140	1.68	12.38					629.50

89	Renovation of CC lining for Paring MIC for Jido	76	0	0	76	57	76.00	0.91	68	30.60	8	4.00	8	4.00	68	4.08	76	6.08	76	0.91	4.88					112.46
90	Sime MIP at jido Village	3	3	10.50	0	0	3.00	0.04	3	1.35	2	1.00	0	0.00	3	0.18	3	0.24	3	0.04	0.28					13.62
91	C/O Mamang MIC for Mamang area at Ngaming.	3	3	10.50	0	0	3.00	0.04	3	1.35	2	1.00	0	0.00	3	0.18	0	0.00	3	0.04	0.25					13.35
92	C/O MIC from Siyik Korong for Koja & Lomang area at Ngaming.	2	2	7.00	0	0	2.00	0.02	2	0.90	1	0.50	0	0.00	2	0.12	0	0.00	2	0.02	0.15					8.72
93	C/O Siken MIC for Gotak WRC Field at Ngaming.	2	2	7.00	0	0	2.00	0.02	2	0.90	1	0.50	0	0.00	2	0.12	0	0.00	2	0.02	0.15					8.72
94	Renovation of Ngaming Vill	8	0	0	8	6	8.00	0.10	7	3.15	1	0.50	1	0.50	7	0.42	8	0.64	8	0.10	0.52					11.92
95	Renovation of Hike Korong MIP at Ngaming Vill	5	0	0	5	3.75	5.00	0.06	5	2.25	1	0.50	0	0.00	5	0.30	5	0.40	5	0.06	0.35					7.67
96	C/o MIC for Sirung Nala to Tiyung WRC field at Ningging	2	2	7.00	0	0	2.00	0.02	2	0.90	1	0.50	0	0.00	2	0.12	0	0.00	2	0.02	0.15					8.72
97	Renovation of Sippi area MIC at Ningging	25	0	0	25	18.75	25.00	0.30	23	10.35	6	3.00	2	1.00	23	1.38	25	2.00	25	0.30	1.77					38.85
98	C/O C.C Lining for Sigang Nallah to Purung WRC Field at Purung Tuting	2	2	7.00	0	0	2.00	0.02	2	0.90	2	1.00	0	0.00	2	0.12	0	0.00	2	0.02	0.20					9.27
99	C/O Sinyeng MIC for Jobo area at Tuting.	2	2	7.00	0	0	2.00	0.02	2	0.90	2	1.00	0	0.00	2	0.12	0	0.00	2	0.02	0.20					9.27
100	C/O Gune MIC for Gune area at Tuting.	2	2	7.00	0	0	2.00	0.02	2	0.90	2	1.00	0	0.00	2	0.12	0	0.00	2	0.02	0.20					9.27
101	C/O Simar Nallah to Dongkor	2	2	7.00	0	0	2.00	0.02	2	0.90	2	1.00	0	0.00	2	0.12	0	0.00	2	0.02	0.20					9.27

C. 3rd Year: 2017 - 18 (Har Khet Ko Pani)

S N o	Name of Scheme	C C A in Ha	Creation of new water sources		repair, restoration and renovation of defunct water sources		Command Area Development and Water Management (CAD&WM) Programme																G/Total
			Surface Minor Irrigation		Renovation of Existing Surface MI Schemes		Survey, Planning and designing of OFD Works		Lined channels		Mechanised land leveling		Micro irrigation		Construction of Field, intermediate and link drains		Correction of System Deficiency		Onetime grant to registered WUAs		Estt Cost @ 10% of a, b, c, d & e		
			Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	
1	MIP at Sisi river for Goging area at Pugging	119	119	416.50	0	0	119	1.43	107	48.15	89	44.50	12	6.00	107	6.42	0	0.00	119	1.43	10.51	534.94	
2	MIP for Mapur area at Pugging	20	0	0	20	15.00	20	0.24	18	8.10	12	6.00	2	1.00	18	1.08	20	1.60	20	0.24	1.78	35.04	
3	C/O MIC at Abo Nala at Abo cultivation field at Pugging	10	0	0	10	7.50	10	0.12	9	4.05	4	2.00	1	0.50	9	0.54	10	0.80	10	0.12	0.79	16.42	
4	MIP at Sirin River for Kyoying Area at Gette	250	250	875.00	0	0	250	3.00	225	101.25	188	94.00	25	12.50	225	13.50	0	0.00	250	3.00	22.13	1124.38	
5	Sipet Korong MIC at Gette village.	60	0	0	60	45.00	60	0.72	54	24.30	15	7.50	6	3.00	54	3.24	60	4.80	60	0.72	4.28	93.56	
6	C/O MIP at Sikur Korong for Gette Village.	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47	
7	Gobi area MIC at Gette village.	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47	
8	Ilung area MIC at Gette village.	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47	
9	Mopang area MIC at Yingkiang H.Q.	11	11	38.50	0	0.00	11	0.13	10	4.50	3	1.50	1	0.50	10	0.60	0	0.00	11	0.13	0.71	46.57	
10	Simar area MIC at Yingkiang H.Q.	5	5	17.50	0	0.00	5	0.06	5	2.25	3	1.50	0	0.00	5	0.30	0	0.00	5	0.06	0.41	22.08	
11	MIP at Monyir from Sipat Korong at Yingkiang	10	0	0.00	10	7.50	10	0.12	9	4.05	3	1.50	1	0.50	9	0.54	10	0.80	10	0.12	0.74	15.87	

12	Persing area MIC at Yingkiong H.Q.	1	1	3.50	0	0.00	1	0.012	1	0.45	0	0.00	0	0.00	1	0.06	0	0.00	1	0.01	0.05	4.08
13	Lane area MIC at Halleng village.	3	0	0	3	2.25	3	0.04	3	1.35	2	1.00	0	0.00	3	0.18	3	0.24	3	0.04	0.28	5.37
14	Kikyang MIP at Haleng village	10	0	0	10	7.50	10	0.12	9	4.05	3	1.50	1	0.50	9	0.54	10	0.80	10	0.12	0.74	15.87
15	MIP at sire nallah for Gampak area at Simong	100	100	350.00	0	0	100	1.20	90	40.50	75	37.50	10	5.00	90	5.40	0	0.00	100	1.20	8.84	449.64
16	Kamro MIP at Simong	75	0	0	75	56.25	75	0.90	68	30.60	19	9.50	7	3.50	68	4.08	75	6.00	75	0.90	5.37	117.10
17	Siyeng area MIC at Simong village.	100	0	0	100	75.00	100	1.20	90	40.50	15	7.50	10	5.00	90	5.40	100	8.00	100	1.20	6.64	150.44
18	Jorak area MIC at Simong village.	4	0	0	4	3.00	4	0.05	4	1.80	2	1.00	0	0.00	4	0.24	4	0.32	4	0.05	0.34	6.80
19	Jone area MIC at Simong village.	5	0	0	5	3.75	5	0.06	5	2.25	1	0.50	0	0.00	5	0.30	5	0.40	5	0.06	0.35	7.67
20	MIP from Rading-Himu korong to Nyumnyung cultivation field at Simong.	10	0	0	10	7.50	10	0.12	9	4.05	3	1.50	1	0.50	9	0.54	10	0.80	10	0.12	0.74	15.87
21	MIP of MIP at Modam cultivation area Simong Village.	8	0	0	8	6.00	8	0.10	7	3.15	3	1.50	1	0.50	7	0.42	8	0.64	8	0.10	0.62	13.02
22	C/o MIP for Pinying cultivation field at 12km Haleng Village.	14	14	49.00	0	0	14	0.17	13	5.85	4	2.00	1	0.50	13	0.78	0	0.00	14	0.17	0.91	59.38
23	Tapin area MIC at 11 km L/Camp.	8	0	0	4	3.00	4.00	0.05	4	1.80	1	0.50	0	0.00	4	0.24	8	0.64	4	0.05	0.34	6.62
24	Pobang area MIC at 11 km L/Camp.	5	0	0	5	3.75	5	0.06	5	2.25	1	0.50	0	0.00	5	0.30	5	0.40	5	0.06	0.35	7.67
25	MIC for Raying to Sidar area at Gobuk	13	0	0	13	9.75	13	0.16	12	5.40	3	1.50	1	0.50	12	0.72	13	1.04	13	0.16	0.92	20.14
26	Singak area MIC at Gobuk village.	30	0	0	30	22.50	30	0.36	27	12.15	11	5.50	3	1.50	27	1.62	30	2.40	30	0.36	2.32	48.71
27	Jikam area MIC at Gobuk village.	10	0	0	10	7.50	10	0.12	9	4.05	5	2.50	1	0.50	9	0.54	10	0.80	10	0.12	0.84	16.97
28	C/O MIP for Amkong Agril. Land from Tar Nallah at Gobuk .	10	0	0	10	7.50	10	0.12	9	4.05	4	2.00	1	0.50	9	0.54	10	0.80	10	0.12	0.79	16.42
29	Naria area MIC at Gobuk village.	6	0	0	6	4.50	6	0.07	5	2.25	2	1.00	1	0.50	5	0.30	6	0.48	6	0.07	0.45	9.62
	Sub Total =	921	500	1750	417	312.75	917	11.00	828	372.6	477	238.5	89	44.50	828	49.68	421	33.68	917	11.00	73.95	2897.67
30	C/o Epong MIC (side) area at Bomdo	40	0	0	40	30.00	40	0.48	36	16.20	4	2.00	4	2.00	36	2.16	40	3.20	40	0.48	2.56	59.08
32	C/O Epong MIC at Bomdo Village.	12	0	0	12	9.00	12	0.14	11	4.95	1	0.50	1	0.50	11	0.66	12	0.96	12	0.14	0.76	17.62

33	C/O Sigit korong MIC for Yitbung area at Bomdo Village.	9	0	0	9	6.75	9	0.11	8	3.60	1	0.50	1	0.50	8	0.48	9	0.72	9	0.11	0.58	13.35
34	C/O C.C lining for Boyong area at Bomdo Village.	11	0	0	11	8.25	11	0.13	10	4.50	1	0.50	1	0.50	10	0.60	11	0.88	11	0.13	0.70	16.19
35	C/O C.C lining for Gong MIC for Satding area at Janbo Village	5	5	17.50	0	0	5.00	0.06	5	2.25	3	1.50	0	0.00	5	0.30	0	0.00	5	0.06	0.41	22.08
36	C/o Angong Korong MIC at Janbo	80	0	0	80	60.00	80	0.96	72	32.40	8	4.00	8	4.00	72	4.32	80	6.40	80	0.96	5.11	118.15
37	MIP for Gai Dumit area from siri Stream at Ramsing Village.	262	26 2	917.00	0	0	262	3.14	236	106.2 0	15 7	78.50	26	13.0 0	236	14.1 6	0	0.00	262	3.14	21.19	1156.3 4
38	MIP for Eatpom area from Over flow of Janbung and Onbung Stream at Ramsing Village.	51	51	178.50	0	0	51	0.61	46	20.70	26	13.00	5	2.50	46	2.76	0	0.00	51	0.61	3.90	222.58
39	MIP for Kumdung area from Onbung Stream at Ramsing Village.	44	44	154.00	0	0	44	0.53	40	18.00	22	11.00	4	2.00	40	2.40	0	0.00	44	0.53	3.34	191.80
40	C/o Lokpang area MIC at Ramsing	16	0	0	16	12.00	16	0.19	14	6.30	2	1.00	2	1.00	14	0.84	16	1.28	16	0.19	1.04	23.84
41	C/o Siring Korong MIC at Ramsing	200	0	0	200	150.00	200	2.40	180	81.00	20	10.00	20	10.0 0	180	10.8 0	20 0	16.0 0	200	2.40	12.78	295.38
42	MIP for Roding Dangkem area from siri Stream at Pitung Village.	205	20 5	717.50	0	0	205	2.46	185	83.25	10 5	52.50	20	10.0 0	185	11.1 0	0	0.00	205	2.46	15.69	894.96
43	MIP for Lower Tabeng area from siri Stream at Gossang	18	18	63.00	0	0	18	0.22	16	7.20	9	4.50	2	1.00	16	0.96	0	0.00	18	0.22	1.37	78.46
44	MIP of Dine area at Gossang	60	0	0	60	45.00	60	0.72	54	24.30	6	3.00	6	3.00	54	3.24	60	4.80	60	0.72	3.83	88.61
45	MIP for ONE area from sirup Nallah at Gossang	48	0	0	48	36.00	48	0.58	43	19.35	5	2.50	5	2.50	43	2.58	48	3.84	48	0.58	3.08	71.00
46	MIP for Tabeng area from Siri stream at Gossang Village	22	0	0	22	16.50	22	0.26	20	9.00	2	1.00	2	1.00	20	1.20	22	1.76	22	0.26	1.40	32.39
47	C/o CC Linning for Dino MIP at Gossang	35	0	0	35	26.25	35	0.42	32	14.40	4	2.00	3	1.50	32	1.92	35	2.80	35	0.42	2.26	51.97
48	C/o Legieng One MIP at Gossang	8	0	0	8	6.00	8	0.10	7	3.15	1	0.50	1	0.50	7	0.42	8	0.64	8	0.10	0.52	11.92
49	MIP for Dankir Lakleng area from siri Stream at Moying Village.	20	20	70.00	0	0	20	0.24	18	8.10	12	6.00	2	1.00	18	1.08	0	0.00	20	0.24	1.62	88.28
50	MIP for Simey area from sinyu Nallah at Karko.	4	4	14.00	0	0	4	0.05	4	1.80	2	1.00	0	0.00	4	0.24	0	0.00	4	0.05	0.30	17.44

51	MIP for Sikit-Saryo-Noke area at Karko Village.	82	82	287.00	0	0	82	0.98	74	33.30	42	21.00	8	4.00	74	4.44	0	0.00	82	0.98	6.27	357.98
52	C/O CC lining from Belum nallah to Mitpak area at Karko	8	0	0	8	6.00	8	0.10	7	3.15	1	0.50	1	0.50	7	0.42	8	0.64	8	0.10	0.52	11.92
53	C/O CC lining from Sipet nallah to Sikit paddy field at karko	8	0	0	8	6.00	8	0.10	7	3.15	1	0.50	1	0.50	7	0.42	8	0.64	8	0.10	0.52	11.92
54	C/O CC lining from Sarpo nallah to Sarpo area at Karko	6	0	0	6	4.50	6	0.07	5	2.25	1	0.50	1	0.50	5	0.30	6	0.48	6	0.07	0.40	9.07
55	C/O CC Linning for Detu-Ado area at Karko village	4	0	0	4	3.00	4	0.05	4	1.80	1	0.50	0	0.00	4	0.24	4	0.32	4	0.05	0.29	6.25
56	MIP for upper right bank area from Perem Sirng at Karko Village.	8	0	0	8	6.00	8	0.10	7	3.15	1	0.50	1	0.50	7	0.42	8	0.64	8	0.10	0.52	11.92
57	C/o Sisup Korong MIC at Karko	138	0	0	138	103.50	138	1.66	124	55.80	14	7.00	14	7.00	124	7.44	13 8	11.0 4	138	1.66	8.83	203.92
58	C/o Sikit Siyo korong MIC at Karko	138	0	0	138	103.50	138	1.66	124	55.80	14	7.00	14	7.00	124	7.44	13 8	11.0 4	138	1.66	8.83	203.92
59	C/o Safe disposal of tail race water of Tundung MIC at Karko	76	0	0	76	57.00	76	0.91	68	30.60	8	4.00	8	4.00	68	4.08	76	6.08	76	0.91	4.88	112.46
60	MIP for Pinoyoying area from Sisup Stream Tegeng	22	0	0	22	16.50	22	0.26	20	9.00	2	1.00	2	1.00	20	1.20	22	1.76	22	0.26	1.40	32.39
61	C/O CC Linning for Kome area from sisup steam Tegeng	6	0	0	200	150.00	6.00	0.07	5	2.25	1	0.50	1	0.50	5	0.30	6	0.48	6	0.07	12.78	166.95
62	MIP for Oksin area from Sisup Stream at Tegeng Village.	6	0	0	205	153.75	6.00	0.07	5	2.25	1	0.50	1	0.50	5	0.30	6	0.48	6	0.07	15.69	173.61
63	C/o MIP for Jelong area from Sidok stream at Jengging	6	6	21.00	0	0	6	0.07	5	2.25	4	2.00	1	0.50	5	0.30	0	0.00	6	0.07	0.51	26.70
64	C/O C.C Linning for Langging area from Siyat Korong at Jengging village	3	3	10.50	0	0	3.00	0.04	3	1.35	2	1.00	0	0.00	3	0.18	0	0.00	3	0.04	0.25	13.35
65	C/O CC Linning for Sikan area from Siyat Korong Jengging	2	2	7.00	0	0	2.00	0.02	2	0.90	1	0.50	0	0.00	2	0.12	0	0.00	2	0.02	0.15	8.72
66	C/O MIC for Rebung to Dete area at Jengging	7	0	0.00	7	5.25	7.00	0.08	6	2.70	1	0.50	1	0.50	6	0.36	7	0.56	7	0.08	0.46	10.50

67	C/o MIP for Loklung area from Sido stream at Jengging	5	5	17.50	0	0	5.00	0.06	5	2.25	1	0.50	0	0.00	5	0.30	0	0.00	5	0.06	0.31	20.98
68	MIP for Loda area from siyat Nallal at Jengging.	8	0	0	8	6.00	8	0.10	7	3.15	1	0.50	1	0.50	7	0.42	8	0.64	8	0.10	0.52	11.92
	Sub Total =	1683	707	2474.5	1369	1026.75	1683	20.196	1515	681.75	488	244.00	168	84.00	1515	90.90	976	78.08	1683	20.196	145.57	4865.94
69	Sisang MIC for Tilkong Yoying area at Damro Kumku Village	150	0	0	150	112.50	150	1.80	135	60.75	15	7.50	15	7.50	135	8.10	150	12.00	150	1.80	9.59	221.54
70	MIP for Gemik Area from Sipong River at Damro Gidum	195	195	682.50	0	0	195	2.34	176	79.20	98	49.00	19	9.50	176	10.56	0	0.00	195	2.34	14.83	850.27
71	MIP for Ramging Area from Ramging Stream at Damro Gidum	2	2	7.00	0	0	2	0.02	2	0.90	1	0.50	0	0.00	2	0.12	0	0.00	2	0.02	0.15	8.72
72	MIP for Pyalem Agri. Land from Yolek Korong at Damroh Gidum	6	0	0.00	6	4.50	6	0.07	5	2.25	2	1.00	1	0.50	5	0.30	6	0.48	6	0.07	0.45	9.62
73	MIP at Pumbi area at Damro Gingkong	5	0	0	5	3.75	5	0.06	5	2.25	1	0.50	0	0.00	5	0.30	5	0.40	5	0.06	0.35	7.67
74	MIP for Bogyo Area from sijum Stream at Damro Boga Lasing	106	106	371.00	0	0	106	1.27	95	42.75	80	40.00	11	5.50	95	5.70	0	0.00	106	1.27	9.40	476.89
75	c/o MIP from Pabang stream to Mongyang area at Milang Karket	391	391	1368.50	0	0	391	4.69	352	158.40	293	146.50	39	19.50	352	21.12	0	0.00	391	4.69	34.55	1757.95
76	MIP Sibem Agri. Land from Sibem Stream at Milang Langdum Langkong	6	0	0	6	4.50	6	0.07	5	2.25	2	1.00	1	0.50	5	0.30	6	0.48	6	0.07	0.45	9.62
77	MIP for Sinyan Arik from Sinyan Stream at New Milang.	24	0	0	24	18.00	24	0.29	22	9.90	4	2.00	2	1.00	22	1.32	24	1.92	24	0.29	1.61	36.33
78	MIP for Siper Sabha from Lasang Nallah at Dalbing Gidum	26	0	0	26	19.50	26	0.31	23	10.35	20	10.00	3	1.50	23	1.38	26	2.08	26	0.31	2.53	47.96
79	Sopet MIC for Nyoba area at Dalbing Gidum Village	3	3	10.50	0	0.00	3.00	0.04	3	1.35	2	1.00	0	0.00	3	0.18	0	0.00	3	0.04	0.25	13.35
80	Construction of MIC at Hangker area Dalbing Gidum	10	10	35.00	0	0	10	0.12	9	4.05	3	1.50	1	0.50	9	0.54	0	0.00	10	0.12	0.66	42.49
81	MIP for Lagru from Singgu Nallah at Dalbing Bellang	14	14	49.00	0	0	14	0.17	13	5.85	11	5.50	1	0.50	13	0.78	0	0.00	14	0.17	1.26	63.23
82	MIP at sassong in Dalbing Bellang	25	0	0	25	18.75	25	0.30	23	10.35	4	2.00	2	1.00	23	1.38	25	2.00	25	0.30	1.67	37.75

83	C/O MIC at Singak area at Kolung	8	8	28.00	0	0	8	0.10	7	3.15	6	3.00	1	0.50	7	0.42	0	0.00	8	0.10	0.71	35.97
84	MIP for Kolung Arik from Singyak Stream at Kolung	6	0	0	6	4.50	6	0.07	5	2.25	2	1.00	1	0.50	5	0.30	6	0.48	6	0.07	0.45	9.62
85	MIC for Kolung area at Kolung village	4	6	21.00	0	0.00	4	0.05	4	1.80	2	1.00	0	0.00	4	0.24	0	0.00	4	0.05	0.30	24.44
86	MIP for Ranyin Area from Hingak Stream at Kolung	10	10	35.00	0	0	10	0.12	9	4.05	5	2.50	1	0.50	9	0.54	0	0.00	10	0.12	0.76	43.59
87	MIP for sibung agril land at Mariyang	17	17	59.50	0	0	17	0.20	15	6.75	13	6.50	2	1.00	15	0.90	0	0.00	17	0.20	1.52	76.58
88	MIP at tayup area at Mariyang	8	0	0.00	8	6.00	8.00	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47
89	MIP for Komak Arik from Buang Stream at Mariyang.	31	0	0	31	23.25	31	0.37	28	12.60	8	4.00	3	1.50	28	1.68	31	2.48	31	0.37	2.23	48.48
90	MIP for meane Roming area from sireng Nallah at Mopom Adi Pasi Sikko.	76	76	266.00	0	0	76	0.91	68	30.60	57	28.50	8	4.00	68	4.08	0	0.00	76	0.91	6.72	341.72
91	MIP for Sinme area from Siyat stream at Adi Pasi Sikko Village.	116	0	0	116	87.00	116	1.39	104	46.80	29	14.50	12	6.00	104	6.24	116	9.28	116	1.39	8.28	180.88
92	MIP for Peying area from Siyang stream at Adi Pasi Bine Village.	70	0	0	70	52.50	70	0.84	63	28.35	11	5.50	7	3.50	63	3.78	70	5.60	70	0.84	4.67	105.58
	Sub Total =	1309	838	2933	473	354.75	1309	15.708	1178	530.10	671	335.50	131	65.5	1178	70.68	473	37.84	1309	15.708	103.96	4462.75
93	MIP at Sipo nallah for pinying and dibo area Komkar (Buksang)	12	12	42.00	0	0	12	0.14	11	4.95	9	4.50	1	0.50	11	0.66	0	0.00	12	0.14	1.06	53.96
94	MIP for Sibo Korong at Sipit Area at Komkar (Buksang).	9	9	31.50	0	0	9	0.11	8	3.60	6	3.00	1	0.50	8	0.48	0	0.00	9	0.11	0.76	40.06
95	Mip at Silli Stream for Pangri rigo area at Komkar (Buksang)	6	6	21.00	0	0	6	0.07	5	2.25	4	2.00	1	0.50	5	0.30	0	0.00	6	0.07	0.51	26.70
96	MIP at Sillu for upper Komkar (Rasing)	200	200	700.00	0	0	200	2.40	180	81.00	142	71.00	20	10.00	180	10.80	0	0.00	200	2.40	17.28	894.88
97	MIP from sirang korong to rayang area at komkar (Rasing)	3	3	10.50	0	0	3	0.04	3	1.35	2	1.00	0	0.00	3	0.18	0	0.00	3	0.04	0.25	13.35
98	MIC for Siding Kumku area at Komkar (Rasing) village.	5	0	0.00	5	3.75	5	0.06	5	2.25	1	0.50	0	0.00	5	0.30	5	0.40	5	0.06	0.35	7.67

99	MIP at Sikadine area at Sikadine	10	0	0	10	7.50	10	0.12	9	4.05	1	0.50	1	0.50	9	0.54	10	0.80	10	0.12	0.64	14.77
100	MIP at Petot Korong at Peram	15	0	0	15	11.25	15	0.18	14	6.30	2	1.00	1	0.50	14	0.84	15	1.20	15	0.18	0.98	22.43
101	MIC from Lising river to Sidum Moling area at Geku.	8	8	28.00	0	0	8	0.10	7	3.15	6	3.00	1	0.50	7	0.42	0	0.00	8	0.10	0.71	35.97
102	MIP for Dengging Poming area at Geku	20	0	0	20	15.00	20	0.24	18	8.10	2	1.00	2	1.00	18	1.08	20	1.60	20	0.24	1.28	29.54
103	MIP for Sidum Moling area at Geku	100	0	0	100	75.00	100	1.20	90	40.50	10	5.00	10	5.00	90	5.40	100	8.00	100	1.20	6.39	147.69
104	MIP from Rakya nallah to Pilek-Laruk area at Erying at Sibum village.	10	10	35.00	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
105	MIP for Paring area at Sibum	5	5	17.50	0	0	5.00	0.06	5	2.25	4	2.00	0	0.00	5	0.30	0	0.00	5	0.06	0.46	22.63
106	MIP at Rakya and Shir Nallah for Erying,Laruk,Milong,Tigeng area Sibum	218	218	763.00	0	0	218	2.62	196	88.20	155	77.50	22	11.00	196	11.76	0	0.00	218	2.62	18.85	975.54
107	Tiyit & Ledu MIP under from Sibe Korong Jeru Village.	40	40	140.00			40	0.48	36	16.20	28	14.00	4	2.00	36	2.16	0	0.00	40	0.48	3.44	178.76
108	MIC for Kalek WRC field at Jeru vill.	3	3	10.50	0	0	3.00	0.04	3	1.35	2	1.00	0	0.00	3	0.18	0	0.00	3	0.04	0.25	13.35
109	MIP at Sibe Nallah for Kuyeng area at Jeru	6	6	21.00	0	0	6	0.07	5	2.25	4	2.00	1	0.50	5	0.30	0	0.00	6	0.07	0.51	26.70
110	Construction of MIC from Popne Stream to Popne WRC field at Jeru	8	8	28.00	0	0	8	0.10	7	3.15	6	3.00	1	0.50	7	0.42	0	0.00	8	0.10	0.71	35.97
111	MIC Bogo area at Jeru Village	15	0	0	15	11.25	15.00	0.18	14	6.30	11	5.50	1	0.50	14	0.84	15	1.20	15	0.18	1.43	27.38
112	Sibe Korong MIC at Jeru.	20	0	0	20	15.00	20	0.24	18	8.10	2	1.00	2	1.00	18	1.08	20	1.60	20	0.24	1.28	29.54
113	MIP for Ballek Ellek area from Sijel Stream at Silli	49	49	171.50	0	0	49	0.59	44	19.80	29	14.50	5	2.50	44	2.64	0	0.00	49	0.59	3.94	216.06
114	MIP for Kak Area from silli nallah at silli	7	0	0	7	5.25	7	0.08	6	2.70	1	0.50	1	0.50	6	0.36	7	0.56	7	0.08	0.46	10.50
	Sub Total =	769	577	2019.5	192	144	769	9.228	693	311.85	433	216.5	76	38	693	41.58	192	15.36	769	9.228	62.35	2867.60
115	MIP at Hiya Korong Moyi at Jido	50	50	175.00	0	0	50	0.60	45	20.25	38	19.00	5	2.50	45	2.70	0	0.00	50	0.60	4.45	225.10
116	MIP from Soyit Korong Jido	20	20	70.00	0	0	20	0.24	18	8.10	15	7.50	2	1.00	18	1.08	0	0.00	20	0.24	1.77	89.93

117	MIP at Atying Korong at Kucing	20	20	70.00	0	0	20	0.24	18	8.10	15	7.50	2	1.00	18	1.08	0	0.00	20	0.24	1.77	89.93
118	C/O. Siyik Korong MIC at Kucing	2	2	7.00	0	0	2	0.02	2	0.90	1	0.50	0	0.00	2	0.12	0	0.00	2	0.02	0.15	8.72
119	Pedeng MIP at Ngaming vill	10	10	35.00	0	0	10	0.12	9	4.05	8	4.00	1	0.50	9	0.54	0	0.00	10	0.12	0.91	45.24
120	MIP at Hikeng Korong at Ngaming village	30	30	105.00	0	0	30	0.36	27	12.15	21	10.50	3	1.50	27	1.62	0	0.00	30	0.36	2.58	134.07
121	MIP at Kongki Korong at Nyering	10	10	35.00	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
122	MIP for Nongku at Rising Vill	10	10	35.00	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
123	Koying MIP from Sinon Korong Mosing	10	10	35.00	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
124	Laying MIP from Sinot Korong Mosing	10	10	35.00	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
125	MIP at Karko Lopi nallah at Mosing	5	5	17.50	0	0	5	0.06	5	2.25	3	1.50	0	0.00	5	0.30	0	0.00	5	0.06	0.41	22.08
126	MIP at Rebo Nallah at Mosing	6	6	21.00	0	0	6	0.07	5	2.25	4	2.00	1	0.50	5	0.30	0	0.00	6	0.07	0.51	26.70
127	Tait Korong to Raktok MIP Panggo	10	10	35.00	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
128	Biru to Moyi area Panggo	8	8	28.00	0	0	8	0.10	7	3.15	5	2.50	1	0.50	7	0.42	0	0.00	8	0.10	0.66	35.42
129	MIP at Narbung area at Pango	5	5	17.50	0	0	5	0.06	5	2.25	4	2.00	0	0.00	5	0.30	0	0.00	5	0.06	0.46	22.63
130	Migging robeng MIP at Migging	10	10	35.00	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
131	C/o MIC from Nayang Korong to Mome area at Migging	10	10	35.00	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
132	Mopun Korong MIC for Komi area at Singging	5	5	17.50	0	0	5	0.06	5	2.25	3	1.50	0	0.00	5	0.30	0	0.00	5	0.06	0.41	22.08
133	MIP Sigoot Korong to Kukle area at Singging	5	5	17.50	0	0	5	0.06	5	2.25	3	1.50	0	0.00	5	0.30	0	0.00	5	0.06	0.41	22.08
134	Delong Korong MIP at Memba area at Singging	10	10	35.00	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
135	Sitik MIP WRC field for Likor Yibe at Likor village	40	40	140.00	0	0	40	0.48	36	16.20	28	14.00	4	2.00	36	2.16	0	0.00	40	0.48	3.44	178.76
136	Renovation of Lami Korong MIP at Likor	50	50	175.00	0	0	50	0.60	45	20.25	5	2.50	5	2.50	45	2.70	0	0.00	50	0.60	2.80	206.95
	Sub Total =	336	336	1176	0	0	336	4.032	304	136.80	207	103.50	32	16	304	18.24	0	0	336	4.032	27.51	1486.11
137	Sinyat Korong MIP at Mayung	20	20	70.00	0	0	20	0.24	18	8.10	15	7.50	2	1.00	18	1.08	0	0.00	20	0.24	1.77	89.93

138	Sidori MIP for Simey and Andeng areas at Bishing	20	20	70.00	0	0	20	0.24	18	8.10	15	7.50	2	1.00	18	1.08	0	0.00	20	0.24	1.77	89.93
139	Silingri MIP for Damchang area at Gelling	21	21	73.50	0	0	21	0.25	19	8.55	16	8.00	2	1.00	19	1.14	0	0.00	21	0.25	1.87	94.56
140	Serapchu MIP for Payindem area	10	10	35.00	0	0	10	0.12	9	4.05	8	4.00	1	0.50	9	0.54	0	0.00	10	0.12	0.91	45.24
141	Awa MIP for Simuling	20	20	70.00	0	0	20	0.24	18	8.10	0	0.00	2	1.00	18	1.08	0	0.00	20	0.24	1.02	81.68
142	Gumpo MIC at Nyukkong vill	10	10	35.00	0	0	10	0.12	9	4.05	0	0.00	1	0.50	9	0.54	0	0.00	10	0.12	0.51	40.84
143	MIP for Simuge	20	20	70.00	0	0	20	0.24	18	8.10	12	6.00	2	1.00	18	1.08	0	0.00	20	0.24	1.62	88.28
144	MIP Damchodem area at Singga	8	8	28.00	0	0	8	0.10	7	3.15	6	3.00	1	0.50	7	0.42	0	0.00	8	0.10	0.71	35.97
	Sub Total =	129	129	451.5	0	0	129	1.55	116	52.20	72	36.00	13	6.5	116	6.96	0	0	129	1.55	10.18	566.44
	G/Total =	5147	3087	10805	2451	1838.25	5143	61.72	4634	2085.30	2348	1174.00	509	254.5	4634	278.04	2062	164.96	5143	61.72	423.52	17146.50

D: 4th Year: 2018 - 19 (Har Khet Ko Pani)

Name of Block	Sl No	Name of Scheme	C C A in Ha	Creation of new water sources		repair, restoration and renovation of defunct water sources		Command Area Development and Water Management (CAD&WM) Programme														G/Total	
				Surface Minor Irrigation		Renovation of Existing Surface MI Schemes		Survey, Planning and designing of OFD Works		Lined channels (a)		Mechanised land leveling (b)		Micro irrigation (c)		Construction of Field, intermediate and link drains (d)		Correction of System Difficiency (e)		Onetime grant to registered WUAs			Estt Cost @ 10% of a, b, c, d & e
				Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin		Fin
Yingki ong	1	Deteng area MIC at Pugging	25	0	0	25	18.75	25	0.30	23	10.35	6	3.00	2	1.00	23	1.38	25	2.00	25	0.30	1.77	38.85
	2	Tesing MIP for Dotang area at Pugging village	22	0	0	22	16.50	22	0.26	20	9.00	6	3.00	2	1.00	20	1.20	22	1.76	22	0.26	1.60	34.59
	3	Tarring area MIC at Pugging village.	15	0	0	15	11.25	15	0.18	14	6.30	4	2.00	1	0.50	14	0.84	15	1.20	15	0.18	1.08	23.53
	4	C/O MIP for Loleng cultivation Area at Pugging Village.	10	0	0	10	7.50	10	0.12	9	4.05	4	2.00	1	0.50	9	0.54	10	0.80	10	0.12	0.79	16.42
	5	MIP at Sipok nallah for Pokhum area at Gette	76	76	266.00	0	0	76	0.91	68	30.60	57	28.50	8	4.00	68	4.08	0	0.00	76	0.91	6.72	341.72
	6	Koyong area MIC at Gette village.	5	0	0	5	3.75	5	0.06	5	2.25	3	1.50	0	0.00	5	0.30	5	0.40	5	0.06	0.45	8.77
	7	Moying area MIC at Gette village.	4	0	0	4	3.00	4	0.05	4	1.80	1	0.50	0	0.00	4	0.24	4	0.32	4	0.05	0.29	6.25
	8	C/o MIP for Geying Area from Arung stream at Gette village.	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47
	9	MIP at sire nallah for Linne Mori area at Simong	80	80	280.00	0	0	80	0.96	72	32.40	60	30.00	8	4.00	72	4.32	0	0.00	80	0.96	7.07	359.71

	10	MIP from Meyeng area from Simu Nalla at Simong	25	25	87.50	0	0	25	0.30	23	10.35	19	9.50	2	1.00	23	1.38	0	0.00	25	0.30	2.22	112.55
	11	MIC Channel at Shing WRC Field at Simong	12	0	0	12	9.00	12	0.14	11	4.95	3	1.50	1	0.50	11	0.66	12	0.96	12	0.14	0.86	18.72
	12	Meyeng area MIC at Simong village.	60	0	0	60	45.00	60	0.72	54	24.30	9	4.50	6	3.00	54	3.24	60	4.80	60	0.72	3.98	90.26
	13	MIP for Dabo cultivation field at Simong village.	20	0	0	20	15.00	20	0.24	18	8.10	5	2.50	2	1.00	18	1.08	20	1.60	20	0.24	1.43	31.19
	14	MIP at Lower Emeng Cultivation area at Simong	12	0	0	12	9.00	12	0.14	11	4.95	5	2.50	1	0.50	11	0.66	12	0.96	12	0.14	0.96	19.82
	15	C/O MIP for Gopun agril. Land from Tekling korong at Yinkiong.	12	0	0	12	9.00	12	0.14	11	4.95	2	1.00	1	0.50	11	0.66	12	0.96	12	0.14	0.81	18.17
	16	MIP at Sikung nallah for Rayi area at Gobuk	225	225	787.50	0	0	225	2.70	203	91.35	169	84.50	22	11.00	203	12.18	0	0.00	225	2.70	19.90	1011.83
	17	Sikur area MIC at Gobuk village.	20	0	0	20	15.00	20	0.24	18	8.10	10	5.00	2	1.00	18	1.08	20	1.60	20	0.24	1.68	33.94
	18	Darin area MIC at Gobuk village.	30	0	0	30	22.50	30	0.36	27	12.15	11	5.50	3	1.50	27	1.62	30	2.40	30	0.36	2.32	48.71
	19	Rokbung MIC for Baring area at Gobuk village.	5	0	0	5	3.75	5	0.06	5	2.25	2	1.00	0	0.00	5	0.30	5	0.40	5	0.06	0.40	8.22
	20	C/O MIP from Tar Nallah to Geyeng Agril. Land at Gobuk.	8	0	0	8	6.00	8	0.10	7	3.15	3	1.50	1	0.50	7	0.42	8	0.64	8	0.10	0.62	13.02
	21	Atlum area MIC at Gobuk village.	8	0	0	8	6.00	8	0.10	7	3.15	3	1.50	1	0.50	7	0.42	8	0.64	8	0.10	0.62	13.02
	22	Libon area MIC at Gobuk village.	7	0	0	7	5.25	7	0.08	6	2.70	2	1.00	1	0.50	6	0.36	7	0.56	7	0.08	0.51	11.05
		Sub Total =	689	406	1421.00	283	212.25	689	8.27	623	280.35	386	193	66	33.00	623	37.38	283	22.64	689	8.27	56.65	2272.81
Jengging	23	C/o CC Linning for Edak Podak MIC at Bomdo	5	0	0	5	3.75	5	0.06	5	2.25	1	0.50	0	0.00	5	0.30	5	0.40	5	0.06	0.35	7.67
	24	C/o Foramtion and Earth Cutting at Kibung Korong to Narying WRC area at Bomdo	6	0	0	6	4.50	6	0.07	5	2.25	1	0.50	1	0.50	5	0.30	6	0.48	6	0.07	0.40	9.07
	25	C/o CC Linning for Robung to Narying WRC area at Bomdo	6	0	0	6	4.50	6	0.07	5	2.25	1	0.50	1	0.50	5	0.30	6	0.48	6	0.07	0.40	9.07
	26	C/o CC Linning for Kobung Nallah to Orluk WRC area at Bomdo	4	0	0	4	3.00	4	0.05	4	1.80	1	0.50	0	0.00	4	0.24	4	0.32	4	0.05	0.29	6.25

27	C/o CC Lining for Podak Nallah to Kurying WRC area at Bomdo	7	0	0	7	5.25	7	0.08	6	2.70	1	0.50	1	0.50	6	0.36	7	0.56	7	0.08	0.46	10.50
28	MIP for Marmong area from Chipping Stream at Janbo village	234	234	819.00	0	0	234	2.81	211	94.95	140	70.00	23	11.50	211	12.66	0	0.00	234	2.81	18.91	1032.64
29	C/o Tusing area MIC at Janbo	70	0	0	70	52.50	70	0.84	63	28.35	14	7.00	7	3.50	63	3.78	70	5.60	70	0.84	4.82	107.23
30	MIP for Reying area from siring Stream at Ramsing Village.	41	41	143.50	0	0	41	0.49	37	16.65	25	12.50	4	2.00	37	2.22	0	0.00	41	0.49	3.34	181.19
31	MIP for Keken area from Dumbung Stream at Ramsing Village.	49	49	171.50	0	0	49	0.59	44	19.80	30	15.00	5	2.50	44	2.64	0	0.00	49	0.59	3.99	216.61
32	C/o Dumbung MIC for Tako area at Ramsing	20	0	0	20	15.00	20	0.24	18	8.10	4	2.00	2	1.00	18	1.08	20	1.60	20	0.24	1.38	30.64
33	C/o CC Lining Loksing MIP at Ramsing	5	0	0	5	3.75	5	0.06	5	2.25	1	0.50	0	0.00	5	0.30	5	0.40	5	0.06	0.35	7.67
34	C/o MIP for Tako and Loksing area at Ramsing	16	0	0	16	12.00	16	0.19	14	6.30	3	1.50	2	1.00	14	0.84	16	1.28	16	0.19	1.09	24.39
35	Kobung area MIP at Ramsing	7	0	0	7	5.25	7	0.08	6	2.70	1	0.50	1	0.50	6	0.36	7	0.56	7	0.08	0.46	10.50
36	MIP for Tako area from Dumbung Stream at Ramsing	34	0	0	34	25.50	34	0.41	31	13.95	7	3.50	3	1.50	31	1.86	34	2.72	34	0.41	2.35	52.20
37	MIP for Yikki area from Dumbung Stream at Ramsing	14	0	0	14	10.50	14	0.17	13	5.85	3	1.50	1	0.50	13	0.78	14	1.12	14	0.17	0.98	21.57
38	CC lining at Lirak area from Jorjo Korong at Ramsing	13	0	0	13	9.75	13	0.16	12	5.40	3	1.50	1	0.50	12	0.72	13	1.04	13	0.16	0.92	20.14
39	MIP for Upper Tabeng area from Siri stream at Gossang Village.	7	7	24.50	0	0	7	0.08	6	2.70	4	2.00	1	0.50	6	0.36	0	0.00	7	0.08	0.56	30.79
40	MIP for Upper One area from Sirup stream at Gossang Village.	25	25	87.50	0	0	25	0.30	23	10.35	16	8.00	2	1.00	23	1.38	0	0.00	25	0.30	2.07	110.90
41	C/o Sirup Korong MIC at Gossang	160	0	0	160	120.00	160	1.92	144	64.80	32	16.00	16	8.00	144	8.64	160	12.80	160	1.92	11.02	245.10
42	C/o Siri Korong MIC at ossang	50	0	0	50	37.50	50	0.60	45	20.25	10	5.00	5	2.50	45	2.70	50	4.00	50	0.60	3.45	76.60
43	C/o Upper Panggiany area MIC at Gossang	15	0	0	15	11.25	15	0.18	14	6.30	3	1.50	1	0.50	14	0.84	15	1.20	15	0.18	1.03	22.98
44	C/O CC Lining for Kenying area at Karko village	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47

	45	MIP of Middle Kinying area from Sisup Stream at karko	12	0	0	12	9.00	12	0.14	11	4.95	2	1.00	1	0.50	11	0.66	12	0.96	12	0.14	0.81	18.17
	46	C/O CC lining from Sisup korong to Upper Lidum at Karko	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47
	47	C/O CC Linning for Rokin Korong to Rokin area Karko	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47
	48	C/o Mitpak area MIC at Karko	324	0	0	324	243.00	324	3.89	292	131.40	65	32.50	32	16.00	292	17.52	324	25.92	324	3.89	22.33	496.45
	49	C/o MIC for Perung Sireng area at Karko	20	0	0	20	15.00	20	0.24	18	8.10	4	2.00	2	1.00	18	1.08	20	1.60	20	0.24	1.38	30.64
	50	C/o CC Linning for Ngubuk area at Karko	25	0	0	25	18.75	25	0.30	23	10.35	5	2.50	2	1.00	23	1.38	25	2.00	25	0.30	1.72	38.30
	51	C/O MIC for sarpo area at kinekibo village	2	0	0	2	1.50	2	0.02	2	0.90	1	0.50	0	0.00	2	0.12	2	0.16	2	0.02	0.17	3.40
	52	MIP for Left Kome area from sisup Nallah at Tegeng	104	104	364.00	0	104	1.25	94	42.30	54	27.00	10	5.00	94	5.64	0	0.00	104	1.25	7.99	454.43	
	53	MIC for Namying at Tegeng village	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47
		Sub Total =	1307	460	1610.00	847	635.25	1307	15.684	1179	530.55	440	220.00	128	64.00	1179	70.74	847	67.76	1307	15.684	95.33	3324.97
Mariyang	54	MIP for Luying Tangyong from Digul Stream at Damro Gingkong	23	0	0	23	17.25	23	0.28	21	9.45	3	1.50	2	1.00	21	1.26	23	1.84	23	0.28	1.51	34.36
	55	MIP for Binnul Area from Sisi Stream at Damro Boga Lasing	76	76	266.00	0	0.00	76	0.91	68	30.60	57	28.50	8	4.00	68	4.08	0	0.00	76	0.91	6.72	341.72
	56	MIP for Rakoh area from Rakoh Stream at Boomi	28	0	0	28	21.00	28	0.34	25	11.25	7	3.50	3	1.50	25	1.50	28	2.24	28	0.34	2.00	43.66
	57	MIP for Madang Area from Madang Stream at Boomi	10	0	0	10	7.50	10	0.00	9	4.05	3	1.50	1	0.50	9	0.54	10	0.80	10	0.12	0.74	15.75
	58	Siga MIC for gorak area at lagru in Milang Lanpong village	10	0	0	10	7.50	10	0.12	9	4.05	3	1.50	1	0.50	9	0.54	10	0.80	10	0.12	0.74	15.87
	59	Irrigation channel from Asi Kampo to Pimsi WRC area at Milang Karket	5	0	0	5	3.75	5	0.06	5	2.25	1	0.50	0	0.00	5	0.30	5	0.40	5	0.06	0.35	7.67
	60	MIP for milang Arik from Sissing Stream at Milang Langdum Langkong.	27	0	0	27	20.25	27	0.32	24	10.80	4	2.00	3	1.50	24	1.44	27	2.16	27	0.32	1.79	40.59

	61	MIP for Gompang Area from pabang Korong at New Milang	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47
	62	MIP for Ruyang Arik from Sasong Nallah at Dalbing Gidum	45	0	0	45	33.75	45	0.54	41	18.45	7	3.50	4	2.00	41	2.46	45	3.60	45	0.54	3.00	67.84
	63	Tara Tamak MIP at Dalbing Bellang	40	0	0	40	30.00	40	0.48	36	16.20	10	5.00	4	2.00	36	2.16	40	3.20	40	0.48	2.86	62.38
	64	MIP for Piimsy Area from Karpok Nallah at Mariyang	66	0	0	66	49.50	66	0.79	59	26.55	10	5.00	7	3.50	59	3.54	66	5.28	66	0.79	4.39	99.34
	65	MIP for Sibyung Cultivation Field from Sibyung Nallah at Mariyang	5	0	0	5	3.75	5	0.06	5	2.25	1	0.50	0	0.00	5	0.30	5	0.40	5	0.06	0.35	7.67
	66	MIP for Rikli Bogong Area from pasang stream at Adi Pasi Sibuk Village.	31	0	0	31	23.25	31	0.37	28	12.60	5	2.50	3	1.50	28	1.68	31	2.48	31	0.37	2.08	46.83
	67	MIP for Miji Papom from Remeng Nallah at Mopom Adi Pasi Sikko.	123	123	430.50	0	0	123	1.48	111	49.95	92	46.00	12	6.00	111	6.66	0	0.00	123	1.48	10.86	552.92
	68	C/O MIC from Sinyan to Momi WRC field at Adi Pasi Bine.	20	20	70.00	0	0	20	0.24	18	8.10	15	7.50	2	1.00	18	1.08	0	0.00	20	0.24	1.77	89.93
		Sub Total =	517	219	766.50	298	223.50	517	6.084	466	209.70	220	110.00	51	25.5	466	27.96	298	23.84	517	6.204	39.73	1439.02
Geku	69	Construction of MIC from Silan Stream to Sidom area at Komkar (Buksang)	10	10	35.00	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
	70	MIP for Lapak Area at Komkar (Buksang) .	8	8	28.00	0	0	8	0.10	7	3.15	5	2.50	1	0.50	7	0.42	0	0.00	8	0.10	0.66	35.42
	71	MIC for Sikon to Guling area at Komkar (Buksang)	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47
	72	MIP at Sillu to Darom area at komkar (Sizer)	5	5	17.50	0	0	5	0.06	5	2.25	3	1.50	0	0.00	5	0.30	0	0.00	5	0.06	0.41	22.08
	73	MIC for Loklung (Akkan) area at komkar (Sizer)	3	3	10.50	0	0	3	0.04	3	1.35	1	0.50	0	0.00	3	0.18	0	0.00	3	0.04	0.20	12.80
	74	MIP at Sillu nallah for Darom area at Komkar (Sizer)	64	64	224.00	0	0	64	0.77	58	26.10	40	20.00	6	3.00	58	3.48	0	0.00	64	0.77	5.26	283.38
	75	MIC from Harsik to Pigo area at Komkar	3	3	10.50	0	0	3	0.04	3	1.35	0	0.00	0	0.00	3	0.18	0	0.00	3	0.04	0.15	12.25
	76	MIP at Minpiang cultivation area at Komkar (Rasing)	12	12	42.00	0	0	12	0.14	11	4.95	6	3.00	1	0.50	11	0.66	0	0.00	12	0.14	0.91	52.31

77	MIP at Kombung nallah for Delek	12	0	0	12	9.00	12	0.14	11	4.95	2	1.00	1	0.50	11	0.66	12	0.96	12	0.14	0.81	18.17
78	MIP at Kombung korong at Boom	10	0	0	10	7.50	10	0.12	9	4.05	2	1.00	1	0.50	9	0.54	10	0.80	10	0.12	0.69	15.32
79	MIP at Sian nallah at taku area at Sumsing	32	32	112.00	0	0	32	0.38	29	13.05	20	10.00	3	1.50	29	1.74	0	0.00	32	0.38	2.63	141.69
80	Construction of MIC from Siam Stream to Talu among WRC field Geku	8	8	28.00	0	0	8	0.10	7	3.15	6	3.00	1	0.50	7	0.42	0	0.00	8	0.10	0.71	35.97
81	MIP Sibe Nallah for Rengkiit (Bomko) Agril. Land Geku.	10	10	35.00	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
82	C.C lining for Poming area MIC at Geku village.	25	0	0	25	18.75	25	0.30	23	10.35	5	2.50	2	1.00	23	1.38	25	2.00	25	0.30	1.72	38.30
83	MIP at Singom for Situm cultivation Area at Geku village.	6	0	0	6	4.50	6	0.07	5	2.25	1	0.50	1	0.50	5	0.30	6	0.48	6	0.07	0.40	9.07
84	MIP at Temik nallah for Koso area at Sibum	326	326	1141.00	0	0	326	3.91	293	131.85	202	101.00	33	16.50	293	17.58	0	0.00	326	3.91	26.69	1442.44
85	MIP at Tamik nallah for Bipok area Sibum	11	11	38.50	0	0	11	0.13	10	4.50	8	4.00	1	0.50	10	0.60	0	0.00	11	0.13	0.96	49.32
86	MIP at Sipong nallah for Lisum area at Pongging	19	19	66.50	0	0	19	0.23	17	7.65	12	6.00	2	1.00	17	1.02	0	0.00	19	0.23	1.57	84.20
87	MIP from Gatling korong to Lungku Area at Pongging vill.	8	0	0	8	6.00	8	0.10	7	3.15	1	0.50	1	0.50	7	0.42	8	0.64	8	0.10	0.52	11.92
88	MIP for Kayum cultivation area from Sipong korong at Pongging village	12	0	0	12	9.00	12	0.14	11	4.95	2	1.00	1	0.50	11	0.66	12	0.96	12	0.14	0.81	18.17
89	MIP for Kaying area from Sikang korong at Padu Abong	10	10	35.00	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
90	MIP for Yapgong Area from sige stream at Padu Abong	126	126	441.00	0	0	126	1.51	113	50.85	89	44.50	13	6.50	113	6.78	0	0.00	126	1.51	10.86	563.51
91	MIP for Rangeng Area from Siyeng Stream at Padu Abong	49	49	171.50	0	0	49	0.59	44	19.80	30	15.00	5	2.50	44	2.64	0	0.00	49	0.59	3.99	216.61
92	CC Lining for seng korong MIP at padu Abong	30	0	0.00	30	22.50	30	0.36	27	12.15	3	1.50	3	1.50	27	1.62	30	2.40	30	0.36	1.92	44.31
93	MIP for Renyung area from Singar stream at Silli	28	28	98.00	0	0	28	0.34	25	11.25	17	8.50	3	1.50	25	1.50	0	0.00	28	0.34	2.28	123.70
94	MIP for Tugan Area from Sijel stream at silli	29	29	101.50	0	0	29	0.35	26	11.70	20	10.00	3	1.50	26	1.56	0	0.00	29	0.35	2.48	129.44

	95	Singer korong MIC at Sili Village	48	0	0	48	36.00	48	0.58	43	19.35	10	5.00	5	2.50	43	2.58	48	3.84	48	0.58	3.33	73.75
		Sub Total =	912	753	2635.50	159	119.25	912	10.944	821	369.45	506	253	91	45.5	821	49.26	159	12.72	912	10.944	73.01	3579.58
Tuting	96	MIP at Pakom Korong at Jido	20	20	70.00	0	0	20	0.24	18	8.10	12	6.00	2	1.00	18	1.08	0	0.00	20	0.24	1.62	88.28
	97	MIP from Rokpi Korong for JidoVillage	10	10	35.00	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
	98	Ilung MIC from Sikeng korong at Ngaming	10	10	35.00	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
	99	CC Lining Dorkang area at Ngaming	50	50	175.00	0	0	50	0.60	45	20.25	31	15.50	5	2.50	45	2.70	0	0.00	50	0.60	4.10	221.25
	100	C/O Bonik MIC Pe-Deng MIC field at Ngaming.	7	126	441.00	0	0	7	0.08	6	2.70	5	2.50	1	0.50	6	0.36	0	0.00	7	0.08	0.61	447.84
	101	MIP from Legong Korong of Udah Dohak area Ngaming	70	49	171.50	0	0	70	0.84	63	28.35	50	25.00	7	3.50	63	3.78	0	0.00	70	0.84	6.06	239.87
	102	Loggong MIP at Sippi area Ningging	200	200	700.00	0	0	200	2.40	180	81.00	124	62.00	20	10.00	180	10.80	0	0.00	200	2.40	16.38	884.98
	103	MIP at Simar stream to Dunning area Tuting	15	15	52.50	0	0	15	0.18	14	6.30	11	5.50	1	0.50	14	0.84	0	0.00	15	0.18	1.31	67.31
	104	MIP at Sinyeng Korong to Jobo area Tuting	15	15	52.50	0	0	15	0.18	14	6.30	11	5.50	1	0.50	14	0.84	0	0.00	15	0.18	1.31	67.31
	105	Gome MIP at Tuting	10	10	35.00	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
	106	Tano MIC at Densing WRC of Tuting	10	10	35.00	0	0	10	0.12	9	4.05	5	2.50	1	0.50	9	0.54	0	0.00	10	0.12	0.76	43.59
	107	MIP at Yasing to Tari Moi area of Mosing	5	5	17.50	0	0	5	0.06	5	2.25	3	1.50	0	0.00	5	0.30	0	0.00	5	0.06	0.41	22.08
	108	Somey MIP from Ngobung Korong Mosing	8	8	28.00	0	0	8	0.10	7	3.15	6	3.00	1	0.50	7	0.42	0	0.00	8	0.10	0.71	35.97
	109	Minggo MIC at Mosing	5	5	17.50	0	0	5	0.06	5	2.25	2	1.00	0	0.00	5	0.30	0	0.00	5	0.06	0.36	21.53
	110	MIP at Silang to Koying area Mosing	20	20	70.00	0	0	20	0.24	18	8.10	12	6.00	2	1.00	18	1.08	0	0.00	20	0.24	1.62	88.28
	111	Mirme MIP for Iteng area Panggo	8	8	28.00	0	0	8	0.10	7	3.15	5	2.50	1	0.50	7	0.42	0	0.00	8	0.10	0.66	35.42
	112	Tibung MIP for Dite area at Pango	200	200	700.00	0	0	200	2.40	180	81.00	124	62.00	20	10.00	180	10.80	0	0.00	200	2.40	16.38	884.98
	113	Sipot to Koying Area at Panggo	10	10	35.00	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
	114	C/O Bhai MIP at Panngo	30	30	105.00	0	0	30	0.36	27	12.15	22	11.00	3	1.50	27	1.62	0	0.00	30	0.36	2.63	134.62

	115	C/O Moi MIP at Angging for Angging village	200	200	70.000	0	0	200	2.40	180	81.00	144	72.00	20	10.00	180	10.80	0	0.00	200	2.40	17.38	895.98
	116	Rokyeng Korong to Nuying area at Angging	7	7	24.50	0	0	7	0.08	6	2.70	4	2.00	1	0.50	6	0.36	0	0.00	7	0.08	0.56	30.79
	117	Kumkong MIP at Likor	10	10	35.00	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
	118	Renovation of CC channel in Sika area in Likor	30	30	105.00	0	0	30	0.36	27	12.15	6	3.00	3	1.50	27	1.62	0	0.00	30	0.36	1.83	125.82
		Sub Total =	950	1048	3668.00	0	0.00	950	11.4	856	385.20	611	305.50	94	47	856	51.36	0	0	950	11.4	78.94	4558.80
Singa	119	Dabur MIP to Dangkor area at Mayung	10	10	35.00	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
	120	Takom MIP at Singging	15	15	52.50	0	0	15	0.18	14	6.30	7	3.50	1	0.50	14	0.84	0	0.00	15	0.18	1.11	65.11
	121	Gulap MIP at Palling	5	5	17.50	0	0	5	0.06	5	2.25	3	1.50	0	0.00	5	0.30	0	0.00	5	0.06	0.41	22.08
	122	Jite MIP at Singha	5	5	17.50	0	0	5	0.06	5	2.25	3	1.50	0	0.00	5	0.30	0	0.00	5	0.06	0.41	22.08
	123	Rakpang MIC at Nigging	10	10	35.00	0	0	10	0.12	9	4.05	4	2.00	1	0.50	9	0.54	0	0.00	10	0.12	0.71	43.04
	124	MIP Benjiri to Keying area at Kopu	30	30	105.00	0	0	30	0.36	27	12.15	19	9.50	3	1.50	27	1.62	0	0.00	30	0.36	2.48	132.97
	125	C/o Raptan MIC at Geling	22	22	77.00	0	0	22	0.26	20	9.00	14	7.00	2	1.00	20	1.20	0	0.00	22	0.26	1.82	97.55
	126	Chumama MIP at Mankota	10	10	35.00	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
	127	Changkigochu MIP at Tasigaon	20	20	70.00	0	0	20	0.24	18	8.10	12	6.00	2	1.00	18	1.08	0	0.00	20	0.24	1.62	88.28
	128	MIP for Simuling	20	20	70.00	0	0	20	0.24	18	8.10	12	6.00	2	1.00	18	1.08	0	0.00	20	0.24	1.62	88.28
	129	MIP for Naksachu for Yamedem area at Singga (Hq)	5	5	17.50	0	0	5	0.06	5	2.25	3	1.50	0	0.00	5	0.30	0	0.00	5	0.06	0.41	22.08
		Sub Total =	152	152	532.00	0	0.00	152	1.824	139	62.55	89	44.5	13	6.5	139	8.34	0	0	152	1.824	12.21	669.748
		G/Total =	4527	3038	10633.00	1587	1190.25	4527	54.20	4084	1837.80	2252	1126.00	443	221.5	4084	245.04	1587	126.96	4527	54.32	355.84	15844.92

E: 5th Year: 2019 – 20 (Har Khet Ko Pani)

Name of Block	SI No	Name of Scheme	C C A in Ha	Creation of new water sources		repair, restoration and renovation of defunct water sources		Command Area Development and Water Management (CAD&WM) Programme														G/Total	
				Surface Minor Irrigation		Renovation of Existing Surface MI Schemes		Survey, Planning and designing of OFD Works		Lined channels (a)		Mechanised land leveling (b)		Micro irrigation (c)		Construction of Field, intermediate and link drains (d)		Correction of System Deficiency (e)		Onetime grant to registered WUAs			Estt Cost @ 10% of a, b, c, d & e
				Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin		Fin
Yingkiong	1	MIP at Ado nallah for Tuuying area at Pugging	19	19	66.5	0	0	19	0.23	17	7.65	11	5.50	2	1.00	17	1.02	0	0.00	19	0.23	1.52	83.65
	2	Lokpek area MIC at Pugging village.	10	0	0	10	7.50	10	0.12	9	4.05	3	1.50	1	0.50	9	0.54	10	0.80	10	0.12	0.74	15.87
	3	Lukuk area MIC at Pugging village.	5	0	0	5	3.75	5	0.06	5	2.25	3	1.50	0	0.00	5	0.30	5	0.40	5	0.06	0.45	8.77
	4	C/O MIP for Kiyng Area from Gabung stream at Pugging Village.	20	0	0	20	15.00	20	0.24	18	8.10	5	2.50	2	1.00	18	1.08	20	1.60	20	0.24	1.43	31.19
	5	Lokpik area MIC at Pugging village.	8	0	0	8	6.00	8	0.10	7	3.15	4	2.00	1	0.50	7	0.42	8	0.64	8	0.10	0.67	13.57
	6	Nangking Lizik area MIC at Gette village.	25	0	0	25	18.75	25	0.30	23	10.35	10	5.00	2	1.00	23	1.38	25	2.00	25	0.30	1.97	41.05
	7	MIP for Kyapong area at Gette village	40	0	0	40	30.00	40	0.48	36	16.20	12	6.00	4	2.00	36	2.16	40	3.20	40	0.48	2.96	63.48
	8	C/O MIP at Getting cultivation field from Pekor korong at gette	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47
	9	Rotang area MIC at Gette village.	10	0	0	10	7.50	10	0.12	9	4.05	5	2.50	1	0.50	9	0.54	10	0.80	10	0.12	0.84	16.97
	10	Pinnyng area MIC at Halleng village.	7	0	0	7	5.25	7	0.08	6	2.70	2	1.00	1	0.50	6	0.36	7	0.56	7	0.08	0.51	11.05
	11	Losun area MIC at Halleng village.	8	0	0	8	6.00	8	0.10	7	3.15	4	2.00	1	0.50	7	0.42	8	0.64	8	0.10	0.67	13.57
	12	Kamla area MIC at Halleng village.	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47

	13	C/O MIC for Rakne area at Simong	10	10	35	0	0	10	0.12	9	4.05	8	4.00	1	0.50	9	0.54	0	0.00	10	0.12	0.91	45.24
	14	MIP for Monggi and Naring area at Simong	30	30	105	0	0	30	0.36	27	12.15	23	11.50	3	1.50	27	1.62	0	0.00	30	0.36	2.68	135.17
	15	Joho area MIC at at Simong village	25	0	0	25	18.75	25	0.30	23	10.35	6	3.00	2	1.00	23	1.38	25	2.00	25	0.30	1.77	38.85
	16	Emmeng area MIC at Simong village.	40	0	0	40	30.00	40	0.48	36	16.20	10	5.00	4	2.00	36	2.16	40	3.20	40	0.48	2.86	62.38
	17	Bentuk area MIC at Simong village.	3	0	0	3	2.25	3	0.04	3	1.35	2	1.00	0	0.00	3	0.18	3	0.24	3	0.04	0.28	5.37
	18	MIP for Jopi cultivation area at Simong village.	8	0	0	8	6.00	8	0.10	7	3.15	1	0.50	1	0.50	7	0.42	8	0.64	8	0.10	0.52	11.92
	19	MIP for Nabang Area from Bolek korong at Simong.	10	0	0	10	7.50	10	0.12	9	4.05	3	1.50	1	0.50	9	0.54	10	0.80	10	0.12	0.74	15.87
	20	MIP for Mojom C/ area at Simong Village.	7	0	0	7	5.25	7	0.08	6	2.70	4	2.00	1	0.50	6	0.36	7	0.56	7	0.08	0.61	12.15
	21	MIP at Japang area from Hidir nallah at Gobuk	112	112	392	0	0	112	1.34	101	45.45	84	42.00	11	5.50	101	6.06	0	0.00	112	1.34	9.90	503.60
	22	Jagging area MIC at Gobuk village.	30	0	0	30	22.50	30	0.36	27	12.15	8	4.00	3	1.50	27	1.62	30	2.40	30	0.36	2.17	47.06
	23	Dollak area MIC at Gobuk village.	22	0	0	22	16.50	22	0.26	20	9.00	6	3.00	2	1.00	20	1.20	22	1.76	22	0.26	1.60	34.59
	24	C/O MIP for Bitlong Agril land from Herong River at Gobuk.	8	0	0	8	6.00	8	0.10	7	3.15	3	1.50	1	0.50	7	0.42	8	0.64	8	0.10	0.62	13.02
	25	C/O MIP from Hihan River to Dolmum Agril. Land at Gobuk.	8	0	0	8	6.00	8	0.10	7	3.15	1	0.50	1	0.50	7	0.42	8	0.64	8	0.10	0.52	11.92
	26	Doormom area MIC at Gobuk village.	5	0	0	5	3.75	5	0.06	5	2.25	1	0.50	0	0.00	5	0.30	5	0.40	5	0.06	0.35	7.67
		Sub Total =	486	171	598.5	315	236.25	486	5.83	438	197.10	223	111.5	48	24.00	438	26.28	315	25.20	486	5.83	38.43	1268.92
Jenggin	27	C/o Foramation and Earth Cutting at Kambung Korong to Kambung WRC area at Bomdo	2	0	0	2	1.50	2	0.02	2	0.90	0	0.00	0	0.00	2	0.12	2	0.16	2	0.02	0.12	2.85
	28	C/o CC Linning for Gambung Nallah to Gambung WRC area at Bomdo	5	0	0	5	3.75	5	0.06	5	2.25	1	0.50	0	0.00	5	0.30	5	0.40	5	0.06	0.35	7.67
	29	C/o CC Linning for Kambung Nallah to Derging WRC area at Bomdo	4	0	0	4	3.00	4	0.05	4	1.80	1	0.50	0	0.00	4	0.24	4	0.32	4	0.05	0.29	6.25
	30	C/o Boying area MIC at Bomdo	50	0	0	50	37.50	50	0.60	45	20.25	10	5.00	5	2.50	45	2.70	50	4.00	50	0.60	3.45	76.60
	31	C/o CC Linning Angong Narko area at Janbo	80	0	0	80	60.00	80	0.96	72	32.40	16	8.00	8	4.00	72	4.32	80	6.40	80	0.96	5.51	122.55

32	MIP for Pumu Geyung area from siring Stream at Ramsing Village.	29	29	101.5	0	0	29	0.35	26	11.70	18	9.00	3	1.50	26	1.56	0	0.00	29	0.35	2.38	128.34
33	MIP for Sikir area from Onbung Stream at Ramsing Village.	100	100	350	0	0	100	1.20	90	40.50	62	31.00	10	5.00	90	5.40	0	0.00	100	1.20	8.19	442.49
34	C/O CC lining protection work at Narsam area at Ramsing	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47
35	C/O MIC and CC lining at Janbung nallah to Sikir WRC field at Ramsing	4	0	0	4	3.00	4	0.05	4	1.80	1	0.50	0	0.00	4	0.24	4	0.32	4	0.05	0.29	6.25
36	C/o CC lining and 2 Nos retaining wall to Korle nallah to Tako, Dumyor, Koching WRC field at Ramsing vill.	15	0	0	15	11.25	15	0.18	14	6.30	3	1.50	1	0.50	14	0.84	15	1.20	15	0.18	1.03	22.98
37	C/O formation cutting with CC lining for Onbung nallah to Kumdum Piyung and Sikir area Ramsing	15	0	0	15	11.25	15	0.18	14	6.30	3	1.50	1	0.50	14	0.84	15	1.20	15	0.18	1.03	22.98
38	MIP for right Tabeng area from Siri stream at Gossang Village.	17	17	59.5	0	0	17	0.20	15	6.75	9	4.50	2	1.00	15	0.90	0	0.00	17	0.20	1.32	74.38
39	C/O MIC earth cutting at Sipot nallah to Sading area Gossang	4	0	0	4	3.00	4	0.05	4	1.80	1	0.50	0	0.00	4	0.24	4	0.32	4	0.05	0.29	6.25
40	C/o Tabeng MIC (Lower siri) at gossang	50	0	0	50	37.50	50	0.60	45	20.25	10	5.00	5	2.50	45	2.70	50	4.00	50	0.60	3.45	76.60
41	C/o Stabilization of siri Korong MIC at Gossang	20	0	0	20	15.00	20	0.24	18	8.10	4	2.00	2	1.00	18	1.08	20	1.60	20	0.24	1.38	30.64
42	C/o MIC for Omne area at Gossang	50	0	0	50	37.50	50	0.60	45	20.25	10	5.00	5	2.50	45	2.70	50	4.00	50	0.60	3.45	76.60
43	C/O MIC for Rebung to Dete area Karko	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47
44	C/O CAD project protection wall at Sigong area Karko	20	0	0	20	15.00	20	0.24	18	8.10	4	2.00	2	1.00	18	1.08	20	1.60	20	0.24	1.38	30.64
45	CC lining at Side to Seram Dubom area at karko	20	0	0	20	15.00	20	0.24	18	8.10	4	2.00	2	1.00	18	1.08	20	1.60	20	0.24	1.38	30.64
46	C C linning for Mitpak paddy field karko	20	0	0	20	15.00	20	0.24	18	8.10	4	2.00	2	1.00	18	1.08	20	1.60	20	0.24	1.38	30.64
47	C/o MIC for Goyit area from Lower Sarpo Korong kinekibo	2	0	0	2	1.50	2	0.02	2	0.90	1	0.50	0	0.00	2	0.12	2	0.16	2	0.02	0.17	3.40

	48	C/O Siyup Nallah to Pegu lake kinetikibo	6	0	0	6	4.50	6	0.07	5	2.25	1	0.50	1	0.50	5	0.30	6	0.48	6	0.07	0.40	9.07
		Sub Total =	529	146	511	383	287.25	529	6.348	478	215.10	167	83.50	51	25.50	478	28.68	383	30.64	529	6.348	38.38	1232.75
Mariyang	49	MIP for Paying Area from Sippa Stream at Damroh Boga Lasing	17	0	0	17	12.75	17	0.20	15	6.75	3	1.50	2	1.00	15	0.90	17	1.36	17	0.20	1.15	25.82
	50	MIP from Digul river to Luying-Tangyong cultivation area Damro Boga Lasing	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47
	51	CC Channel for sissing MIP at Milang Langdum Langkong village	30	0	0	30	22.50	30	0.36	27	12.15	6	3.00	3	1.50	27	1.62	30	2.40	30	0.36	2.07	45.96
	52	MIP Nogo area at New Milang	9	0	0	9	6.75	9	0.11	8	3.60	2	1.00	1	0.50	8	0.48	9	0.72	9	0.11	0.63	13.90
	53	CC Lining for Sassong MIC at Dalbing Bellangvillage	20	0	0	20	15.00	20	0.24	18	8.10	4	2.00	2	1.00	18	1.08	20	1.60	20	0.24	1.38	30.64
	54	MIP for Rokbung Area from Rokbung Nallah at Mariyang	17	17	59.5	0	0	17	0.20	15	6.75	14	7.00	2	1.00	15	0.90	0	0.00	17	0.20	1.57	77.13
	55	MIC from Duksang Stream to Porung Lakru area at Maryang	6	6	21	0	0	6	0.07	5	2.25	3	1.50	1	0.50	5	0.30	0	0.00	6	0.07	0.46	26.15
	56	MIP for Buang area from Buang Stream at Mariyang.	12	0	0	12	9.00	12	0.14	11	4.95	2	1.00	1	0.50	11	0.66	12	0.96	12	0.14	0.81	18.17
	57	MIP for Lower Bridge Area from Sikka Stream at Mariyang	16	0	0	16	12.00	16	0.19	14	6.30	3	1.50	2	1.00	14	0.84	16	1.28	16	0.19	1.09	24.39
	58	MIP for Sage Area from Sasu Nallah at Peki Modi	10	0	0	10	7.50	10	0.12	9	4.05	2	1.00	1	0.50	9	0.54	10	0.80	10	0.12	0.69	15.32
	59	MIP for Disar area from saroh stream Peki Modi	12	0	0	12	9.00	12	0.14	11	4.95	3	1.50	1	0.50	11	0.66	12	0.96	12	0.14	0.86	18.72
	60	CC lining for Momi area MIP at adi pasi Sibuk	40	0	0	40	30.00	40	0.48	36	16.20	8	4.00	4	2.00	36	2.16	40	3.20	40	0.48	2.76	61.28
	61	MIP for Rapu area from Kenying Nallah at Adi Pasi Sikko	29	0	0	29	21.75	29	0.35	26	11.70	6	3.00	3	1.50	26	1.56	29	2.32	29	0.35	2.01	44.54
	62	MIP for Momi Area from sinyang Stream at Mopom at Adi Pasi Bine	63	0	0	63	47.25	63	0.76	57	25.65	13	6.50	6	3.00	57	3.42	63	5.04	63	0.76	4.36	96.73
		Sub Total =	289	23	80.5	266	199.5	289	3.468	259	116.55	71	35.50	30	15	259	15.54	266	21.28	289	3.468	20.41	511.22

Geku	63	MIP at sinyung nallah for pobe area at Komkar (Buksang	84	84	294	0	0	84	1.01	76	34.20	60	30.00	8	4.00	76	4.56	0	0.00	84	1.01	7.28	376.06
	64	MIP for Modong Cultivation field at Komkar (Buksang) .	10	10	35	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
	65	MIC for Mone area at Komkar (Bksang)	20	0	0	20	15.00	20	0.24	18	8.10	4	2.00	2	1.00	18	1.08	20	1.60	20	0.24	1.38	30.64
	66	MIP at Sijum nallah for Hirem area at Komkar (Sizer)	23	23	80.5	0	0	23	0.28	21	9.45	16	8.00	2	1.00	21	1.26	0	0.00	23	0.28	1.97	102.73
	67	MIP at Sinyeng nallah for Libang & Milang Bedang Area Komkar (Rasing)	65	65	227.5	0	0	65	0.78	59	26.55	40	20.00	6	3.00	59	3.54	0	0.00	65	0.78	5.31	287.46
	68	MIP at Hirang Nallah at Jommo area at Jomlo Kupak	12	0	0	12	9.00	12	0.14	11	4.95	2	1.00	1	0.50	11	0.66	12	0.96	12	0.14	0.81	18.17
	69	MIP at Silli River for Liging and Gopong area at Sili Hydel Camp	45	45	157.5	0	0	45	0.54	41	18.45	28	14.00	4	2.00	41	2.46	0	0.00	45	0.54	3.69	199.18
	70	MIC from Sili Nallah to Reyap at Silly Hydel Camp.	8	0	0	8	6.00	8	0.10	7	3.15	1	0.50	1	0.50	7	0.42	8	0.64	8	0.10	0.52	11.92
	71	MIP at Sirok nallah for Sikmi & Meking area at Sumsing.	18	18	63	0	0	18	0.22	16	7.20	11	5.50	2	1.00	16	0.96	0	0.00	18	0.22	1.47	79.56
	72	MIP from Sisen stream to Basi area at Geku.	4	4	14	0	0	4	0.05	4	1.80	2	1.00	0	0.00	4	0.24	0	0.00	4	0.05	0.30	17.44
	73	MIP for Yumruk-Sarpu Cultivation field at Geku.	18	18	63	0	0	18	0.22	16	7.20	11	5.50	2	1.00	16	0.96	0	0.00	18	0.22	1.47	79.56
	74	MIP at Sikki cultivation Area from Sisan korong at Geku	10	10	35	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
	75	MIP Sobang stream to Sobang area at Geku	8	0	0	8	6.00	8	0.10	7	3.15	2	1.00	1	0.50	7	0.42	8	0.64	8	0.10	0.57	12.47
	76	MIP from Namging Korong for Sumbing area at Geku.	10	0	0	10	7.50	10	0.12	9	4.05	2	1.00	1	0.50	9	0.54	10	0.80	10	0.12	0.69	15.32
	77	MIP at Hinyum nallah for Sibum village	389	389	1361.5	0	0	389	4.67	350	157.50	280	140.00	39	19.50	350	21.00	0	0.00	389	4.67	33.80	1742.64
	78	MIP at Sileng nallah in Pongging vill.	10	10	35	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
	79	MIP at Ebung nallah for Relung area at Pongging	15	15	52.5	0	0	15	0.18	14	6.30	9	4.50	1	0.50	14	0.84	0	0.00	15	0.18	1.21	66.21
	80	Ruklak area MIP at padu Tangkum village	88	0	0	88	66.00	88	1.06	79	35.55	18	9.00	9	4.50	79	4.74	88	7.04	88	1.06	6.08	135.02

	81	Siyar MIC for Kangak area at Padu Tangkum Village	2	2	7	0	0	2.00	0.02	2	0.90	1	0.50	0	0.00	2	0.12	0	0.00	2	0.02	0.15	8.72
	82	MIP at Gumpir cultivation area from Yango apko at Padu Tangkum	14	14	49	0	0	14.00	0.17	13	5.85	9	4.50	1	0.50	13	0.78	0	0.00	14	0.17	1.16	62.13
	83	Dolbung Area MIP from Dumik Korong at Padu Tangkum	58	0	0	58	43.50	58.00	0.70	52	23.40	12	6.00	6	3.00	52	3.12	58	4.64	58	0.70	4.02	89.07
	84	MIP for Piryng area from Singer stream at Silli	35	35	122.5	0	0	35.00	0.42	32	14.40	22	11.00	3	1.50	32	1.92	0	0.00	35	0.42	2.88	155.04
	85	MIP for Gaypeng area from Sige stream at silli	48	48	168	0	0	48	0.58	43	19.35	35	17.50	5	2.50	43	2.58	0	0.00	48	0.58	4.19	215.27
	86	MIP at Pargam nallah for Libong area Katan	10	10	35	0	0	10	0.12	9	4.05	2	1.00	1	0.50	9	0.54	0	0.00	10	0.12	0.61	41.94
		Sub Total =	1004	800	2800	204	153	1004	12.048	906	407.70	586	293	98	49	906	54.36	204	16.32	1004	12.048	82.04	3879.52
Tuting	87	MIP from Sidung Korong at Kugging	10	10	35	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
	88	MIP from Sisik Korong at Kugging	10	10	35	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
	89	Koyung MIP at Ningging	10	10	35	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
	90	MIP at Birung Nallah to Tiyum area at Ningging	15	15	52.5	0	0	15	0.18	14	6.30	9	4.50	1	0.50	14	0.84	0	0.00	15	0.18	1.21	66.21
	91	MIP at Densing Gejong MIC to Ongkong Tuting	20	20	70	0	0	20	0.24	18	8.10	12	6.00	2	1.00	18	1.08	0	0.00	20	0.24	1.62	88.28
	92	MIP for Elum Korong to Arik area at Tuting	10	10	35	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
	93	Kakir MIP at Sikut area Tuting	10	10	35	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
	94	C/O MIC from Guhing Korong for Gemang area at Palling.	2	2	7	0	0	2.00	0.02	2	0.90	1	0.50	0	0.00	2	0.12	0	0.00	2	0.02	0.15	8.72
	95	Sigung Nallah MIP for Dongkong area at Palling	7	7	24.5	0	0	7	0.08	6	2.70	5	2.50	1	0.50	6	0.36	0	0.00	7	0.08	0.61	31.34
	96	Improvement of Titing MIC at Palling Village	4	4	14	0	0	4	0.05	4	1.80	2	1.00	0	0.00	4	0.24	0	0.00	4	0.05	0.30	17.44
		Sub Total =	98	98	343	0	0	98	1.176	89	40.05	61	30.5	9	4.5	89	5.34	0	0	98	1.176	8.04	433.782
Singa	97	Langgingri MIP for Jingong area at Bishing	10	10	35	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
	98	Ngalungri MIP to Ngalung area at Kopu	10	10	35	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
	99	WRC field Lebary area to Manery area at Nyukkong	10	10	35	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69

100	Ngalungchu MIP at Yortung	20	20	70	0	0	20	0.24	18	8.10	14	7.00	2	1.00	18	1.08	0	0.00	20	0.24	1.72	89.38
101	Ngalumdem MIP at Mankota	10	10	35	0	0	10	0.12	9	4.05	7	3.50	1	0.50	9	0.54	0	0.00	10	0.12	0.86	44.69
102	Tosichu MIP at Tashigoan	6	6	21	0	0	6	0.07	5	2.25	4	2.00	1	0.50	5	0.30	0	0.00	6	0.07	0.51	26.70
103	Ngalungchu MIP Damchodem area at Simuling	10	10	35	0	0	10	0.12	9	4.05	6	3.00	1	0.50	9	0.54	0	0.00	10	0.12	0.81	44.14
	Sub Total =	76	76	266	0	0	76	0.912	68	30.6	52	26	8	4	68	4.08	0	0	76	0.912	6.48	338.98
	G/Total =	2482	1314	4599	1168	876	2482	29.78	2238	1007.10	1160	580.00	244	122	2238	134.28	1168	93.44	2482	29.78	193.78	7665.17

Annexure II: Strategic Action Plan by Agriculture Department under PMKSY (Per Drop More Crop)

SI No	Name of Block	village		Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
1	2		3	4	5	6	7	8	9
1	YINGKIONG	Pugging		1) Non-DPAP Sprikler	5	5	4	450000	2250000
				2) Secondary storage structure of 1200 cu.m	25	25	4	250000	6250000
				3) On Farm development (distribution of pipe/raised bed	30	30	4	150000	4500000
				4) Training to farmers	4	4	4	24000	96000
		Gette		1) Non-DPAP Sprikler	7	7	4	450000	3150000
				2) Secondary storage structure	25	25	4	250000	6250000
				of 1200 cu.m					
				3) On Farm development	50	50	4	150000	7500000
				(distribution of pipe/raised					
				bed and furrow					
				4) Training to farmers	4	4	4	24000	96000
		Simong		1) Non-DPAP Sprikler	10	10	4	450000	4500000
				2) Secondary storage structure	30	30	4	250000	7500000

			of 1200 cu.m					
			3) On Farm development	50	50	4	150000	750000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	6	6	4	24000	144000
		Gobuk	1) Non-DPAP Sprikler	3	3	4	450000	1350000
			2) Secondary storage structure	20	20	4	250000	500000
			of 1200 cu.m					
			3) On Farm development	20	20	4	150000	300000
			(distribution of pipe/raised					
			bed and furrow					

Sl No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			4) Training to farmers	4	4	4	24000	96000
		Halleng	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	7	7	4	250000	1750000
			of 1200 cu.m					
			3) On Farm development	10	10	4	150000	1500000

			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000

2	JENGGING	Karko	1) Non-DPAP Sprikler	4	4	4	450000	1800000
			2) Secondary storage structure	50	50	4	250000	12500000
			of 1200 cu.m					
			3) On Farm development	50	50	4	150000	7500000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	4	4	4	24000	96000
		Jengging	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	5	5	4	250000	1250000
			of 1200 cu.m					
			3) On Farm development	10	10	4	150000	1500000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000

		Gosang	1) Non-DPAP Sprikler	8	8	4	450000	3600000
			2) Secondary storage structure	50	50	4	250000	12500000
			of 1200 cu.m					
			3) On Farm development	50	50	4	150000	7500000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	4	4	4	24000	96000
		Ramsing	1) Non-DPAP Sprikler	3	3	4	450000	1350000

SI No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			2) Secondary storage structure	15	15	4	250000	3750000
			of 1200 cu.m					
			3) On Farm development	25	25	4	150000	3750000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		Bomdo	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	30	30	4	250000	7500000

			of 1200 cu.m					
			3) On Farm development	25	25	4	150000	3750000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		Janbo	1) Non-DPAP Sprikler	3	3	4	450000	1350000
			2) Secondary storage structure	30	30	4	250000	7500000
			of 1200 cu.m					
			3) On Farm development	25	25	4	150000	3750000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
3	Geku	Komkar	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	30	30	4	250000	7500000
			of 1200 cu.m					
			3) On Farm development	30	30	4	150000	4500000
			(distribution of pipe/raised					

			bed and furrow					
			4) Training to farmers	4	4	4	24000	96000
		Geku	1) Non-DPAP Sprikler	8	8	4	450000	3600000
			2) Secondary storage structure	150	150	4	250000	37500000
			of 1200 cu.m					

Sl No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			3) On Farm development	200	200	4	150000	30000000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	10	10	4	24000	240000
		Sibum	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	20	20	4	250000	5000000
			of 1200 cu.m					
			3) On Farm development	30	30	4	150000	4500000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000

		Sumsing	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	20	20	4	250000	5000000
			of 1200 cu.m					
			3) On Farm development	30	30	4	150000	4500000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		Katan HQ	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	10	10	4	250000	2500000
			of 1200 cu.m					
			3) On Farm development	15	15	4	150000	2250000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		Padu	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	50	50	4	250000	12500000
			of 1200 cu.m					
			3) On Farm development	80	80	4	150000	12000000

			(distribution of pipe/raised					
			bed and furrow					

Sl No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			4) Training to farmers	6	6	4	24000	144000
		Silli	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	30	30	4	250000	7500000
			of 1200 cu.m					
			3) On Farm development	45	45	4	150000	6750000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	4	4	4	24000	96000
		Jeru	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	15	15	4	250000	3750000
			of 1200 cu.m					
			3) On Farm development	45	45	4	150000	6750000
			(distribution of pipe/raised					
			bed and furrow					

			4) Training to farmers	4	4	4	24000	96000
		Pongging	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	15	15	4	250000	3750000
			of 1200 cu.m					
			3) On Farm development	45	45	4	150000	6750000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	4	4	4	24000	96000
4	Mariyang	Kolung	1) Non-DPAP Sprikler	1	1	4	450000	450000
			2) Secondary storage structure	5	5	4	250000	1250000
			of 1200 cu.m					
			3) On Farm development	5	5	4	150000	750000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	1	1	4	24000	24000
		Dalbing	1) Non-DPAP Sprikler	3	3	4	450000	1350000

SI No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			2) Secondary storage structure	40	40	4	250000	10000000
			of 1200 cu.m					
			3) On Farm development	70	70	4	150000	10500000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	5	5	4	24000	120000
		Peki-Modi	1) Non-DPAP Sprikler	0	0	0	0	0
			2) Secondary storage structure	3	3	3	250000	750000
			of 1200 cu.m					
			3) On Farm development	30	30	4	150000	4500000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		Mariyang hq	1) Non-DPAP Sprikler	8	8	4	450000	3600000
			2) Secondary storage structure	50	50	3	250000	12500000
			of 1200 cu.m					

			3) On Farm development	30	30	4	150000	4500000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	5	5	4	24000	120000
		Damro	1) Non-DPAP Sprikler	15	15	4	450000	6750000
			2) Secondary storage structure	80	80	3	250000	20000000
			of 1200 cu.m					
			3) On Farm development	100	100	4	150000	15000000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	8	8	4	24000	192000
		Adipasi-sibuk	1) Non-DPAP Sprikler	2	2	0	450000	900000
			2) Secondary storage structure	18	18	3	250000	4500000
			of 1200 cu.m					
			3) On Farm development	45	45	4	150000	6750000

SI No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			(distribution of pipe/raised					

			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		adipasi-siko bine	1) Non-DPAP Sprikler	2	2	0	450000	900000
			2) Secondary storage structure	35	35	3	250000	8750000
			of 1200 cu.m					
			3) On Farm development	35	35	4	150000	5250000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
5	Tuting	Mosing	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	35	35	3	250000	8750000
			of 1200 cu.m					
			3) On Farm development	35	35	4	150000	5250000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		Migging	1) Non-DPAP Sprikler	2	2	4	450000	900000

			2) Secondary storage structure	30	30	4	250000	7500000
			of 1200 cu.m					
			3) On Farm development	35	35	4	150000	5250000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		Panggo	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	40	40	4	250000	10000000
			of 1200 cu.m					
			3) On Farm development	70	70	4	150000	10500000
			(distribution of pipe/raised					
			bed and furrow					

Sl No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			4) Training to farmers	4	4	4	24000	96000
		Ningging	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	40	40	4	250000	10000000
			of 1200 cu.m					

			3) On Farm development	55	55	4	150000	8250000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	4	4	4	24000	96000
		Tuting	1) Non-DPAP Sprikler	10	10	4	450000	4500000
			2) Secondary storage structure	60	60	4	250000	15000000
			of 1200 cu.m					
			3) On Farm development	80	80	4	150000	12000000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	4	4	4	24000	96000
		Jido	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	7	7	4	250000	1750000
			of 1200 cu.m					
			3) On Farm development	10	10	4	150000	1500000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000

		Pokbir	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	25	25	4	250000	6250000
			of 1200 cu.m					
			3) On Farm development	32	32	4	150000	4800000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		Kugging	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	12	12	4	250000	3000000

SI No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			of 1200 cu.m					
			3) On Farm development	25	25	4	150000	3750000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	4	4	4	24000	96000

		Ngamyiny	1) Non-DPAP Sprinkler	5	5	4	450000	2250000
			2) Secondary storage structure	70	70	4	250000	17500000
			of 1200 cu.m					
			3) On Farm development	67	67	4	150000	10050000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	8	8	4	24000	192000
		Tengo	1) Non-DPAP Sprinkler	2	2	4	450000	900000
			2) Secondary storage structure	6	6	4	250000	1500000
			of 1200 cu.m					
			3) On Farm development	12	12	4	150000	1800000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		Nyering	1) Non-DPAP Sprinkler	2	2	4	450000	900000
			2) Secondary storage structure	13	13	4	250000	3250000
			of 1200 cu.m					
			3) On Farm development	27	27	4	150000	4050000

			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		Gome	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	11	11	4	250000	2750000
			of 1200 cu.m					
			3) On Farm development	28	28	4	150000	4200000
			(distribution of pipe/raised					

SI No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		Lali	1) Non-DPAP Sprikler	3	3	4	450000	1350000
			2) Secondary storage structure	28	28	4	250000	7000000
			of 1200 cu.m					
			3) On Farm development	65	65	4	150000	9750000
			(distribution of pipe/raised					

			bed and furrow					
			4) Training to farmers	4	4	4	24000	96000
		Rishing	1) Non-DPAP Sprikler	3	3	4	450000	1350000
			2) Secondary storage structure	31	31	4	250000	7750000
			of 1200 cu.m					
			3) On Farm development	46	46	4	150000	6900000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	4	4	4	24000	96000
		Pekong	1) Non-DPAP Sprikler	10	10	4	450000	4500000
			2) Secondary storage structure	57	57	4	250000	14250000
			of 1200 cu.m					
			3) On Farm development	65	65	4	150000	9750000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	6	6	4	24000	144000
		Angging-Monge	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	20	20	4	250000	5000000

			of 1200 cu.m					
			3) On Farm development	25	25	4	150000	3750000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		Singing	1) Non-DPAP Sprikler	2	2	4	450000	900000

Sl No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			2) Secondary storage structure	22	22	4	250000	5500000
			of 1200 cu.m					
			3) On Farm development	27	27	4	150000	4050000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	3	3	4	24000	72000
		Likor	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	21	21	4	250000	5250000
			of 1200 cu.m					

			3) On Farm development	26	26	4	150000	3900000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	4	4	4	24000	96000
		Palling	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	30	30	4	250000	7500000
			of 1200 cu.m					
			3) On Farm development	29	29	4	150000	4350000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	3	3	4	24000	72000
6	Singha - Galling	Mayum	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	30	30	4	250000	7500000
			of 1200 cu.m					
			3) On Farm development	33	33	4	150000	4950000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000

		Bishing	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	30	30	4	250000	7500000
			of 1200 cu.m					

SI No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			3) On Farm development	32	32	4	150000	4800000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	3	3	4	24000	72000
		Bona	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	30	30	4	250000	7500000
			of 1200 cu.m					
			3) On Farm development	29	29	4	150000	4350000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	3	3	4	24000	72000
		Kopu	1) Non-DPAP Sprikler	3	3	4	450000	1350000
			2) Secondary storage structure	36	36	4	250000	9000000

			of 1200 cu.m					
			3) On Farm development	45	45	4	150000	6750000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	5	5	4	24000	120000
		Gelling	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	27	27	4	250000	6750000
			of 1200 cu.m					
			3) On Farm development	45	45	4	150000	6750000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	3	3	4	24000	72000
		Norbudling	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	25	25	4	250000	6250000
			of 1200 cu.m					
			3) On Farm development	45	45	4	150000	6750000
			(distribution of pipe/raised					
			bed and furrow					

SI No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			4) Training to farmers	3	3	4	24000	72000
		Nyokkong	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	25	25	4	250000	6250000
			of 1200 cu.m					
			3) On Farm development	32	32	4	150000	4800000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	3	3	4	24000	72000
		Payindam	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	25	25	4	250000	6250000
			of 1200 cu.m					
			3) On Farm development	18	18	4	150000	2700000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	3	3	4	24000	72000

		Yorteng	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	16	16	4	250000	4000000
			of 1200 cu.m					
			3) On Farm development	18	18	4	150000	2700000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	3	3	4	24000	72000
		Mankota-Deokota	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	30	30	4	250000	7500000
			of 1200 cu.m					
			3) On Farm development	35	35	4	150000	5250000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	4	4	4	24000	96000
		Tashi Gaon	1) Non-DPAP Sprikler	2	2	4	450000	900000
			2) Secondary storage structure	18	18	4	250000	4500000

SI No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			of 1200 cu.m					
			3) On Farm development	36	36	4	150000	5400000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	3	3	4	24000	72000
		Sillipu-Simuge	1) Non-DPAP Sprikler	1	1	4	450000	450000
			2) Secondary storage structure	11	11	4	250000	2750000
			of 1200 cu.m					
			3) On Farm development	20	20	4	150000	3000000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	2	2	4	24000	48000
		Singa (old & new)	1) Non-DPAP Sprikler	3	3	4	450000	1350000
			2) Secondary storage structure	34	34	4	250000	8500000
			of 1200 cu.m					
			3) On Farm development	56	56	4	150000	8400000

			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	4	4	4	24000	96000
		Simuling-Angachi	1) Non-DPAP Sprikler	1	1	4	450000	450000
			2) Secondary storage structure	4	4	4	250000	1000000
			of 1200 cu.m					
			3) On Farm development	6	6	4	150000	900000
			(distribution of pipe/raised					
			bed and furrow					
			4) Training to farmers	1	1	4	24000	24000
		Silage	1) Non-DPAP Sprikler	0	0	0	0	0
			2) Secondary storage structure	3	3	4	250000	750000
			of 1200 cu.m					
			3) On Farm development	3	3	4	150000	450000
			(distribution of pipe/raised					

SI No	Name of Block	village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
			bed and furrow					
			4) Training to farmers	1	1	4	24000	24000
							Total	889694000

Annexure III: Physical & Financial Phasing Of Proposed Activity Wise Work Component under Pmksy by Agriculture Department

A. 1st Year: 2016 - 17 (Per Drop More Crop)

Name of Block	Micro Irrigation		Supplementary water management activities						Grand Total
	Non-DPAP Sprikler		Secondary storage structure of 1200 cu.m OFD Works		On Farm development (distribution of pipe/raised bed and furrow)		Training to farmers		
	Phy (Ha)	Fin	Phy (Ha)	Fin	Phy (Ha)	Fin	Phy (No)	Fin	Fin
Yingkiong	27	121.50	107	267.50	160	240.00	20	4.80	633.80
Jengging	22	99.00	180	450.00	185	277.50	16	3.84	830.34
Grand Total	49	220.5	287	717.5	345	517.5	36	8.64	1464.14

B. 2nd Year: 2017 - 18 (Per Drop More Crop)

Name of Block	Micro Irrigation		Supplementary water management activities						Grand Total
	Non-DPAP Sprikler		Secondary storage structure of 1200 cu.m OFD Works		On Farm development (distribution of pipe/raised bed and furrow)		Training to farmers		
	Phy (Ha)	Fin	Phy (Ha)	Fin	Phy (Ha)	Fin	Phy (No)	Fin	Fin
Geku	24	108.00	340	850.00	520	780.00	38	9.12	1747.12
Mariyang	31	139.50	231	577.50	315	472.50	25	6.00	1195.50
Grand Total	55	247.5	571	1427.5	835	1252.5	63	15.12	2942.62

C. 3rd Year: 2018 - 19 (Per Drop More Crop)

Name of Block	Per drop more crop (Micro Irrigation)		Supplementary water management activities						Grand Total
	Non-DPAP Sprikler		Secondary storage structure of 1200 cu.m OFD Works		On Farm development (distribution of pipe/raised bed and furrow)		Training to farmers		
	Phy (Ha)	Fin	Phy (Ha)	Fin	Phy (Ha)	Fin	Phy (No)	Fin	Fin
Tuting	59	265.50	558	1395.00	759	1138.50	64	15.36	2814.36
Grand Total	59	265.5	558	1395	759	1138.5	64	15.36	2814.36

D. 4th Year: 2019 - 20 (Per Drop More Crop)

Name of Block	Per drop more crop (Micro Irrigation)		Supplementary water management activities						Grand Total
	Non-DPAP Sprikler		Secondary storage structure of 1200 cu.m OFD Works		On Farm development (distribution of pipe/raised bed and furrow)		Training to farmers		
	Phy (Ha)	Fin	Phy (Ha)	Fin	Phy (Ha)	Fin	Phy (No)	Fin	Fin
Singha - Galling	28	126.00	344	860.00	453	679.50	43	10.32	1675.82
Grand Total	28	126	344	860	453	679.5	43	10.32	1675.82

Annexure IV: Strategic Action Plan by Horticulture Department for Irrigation in Upper Siang District under Pmkxy (Per Drop More Crop)

Sr. No.	Name of village	Name of Block	Component	Activity	Total Number	Total Command Area (Ha.)	Period of implementation	Total Estimated Cost (in Rs. Lakhs)	2016-17 Cost (in Rs. Lakhs)	2017-18 Cost (in Rs. Lakhs)	2018-19 Cost (in Rs. Lakhs)	2019-20 Cost (in Rs. Lakhs)
1	Tuting HQ.	Tuting	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
2	Kugging village	Tuting	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8
3	Ngaming village	Tuting	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8
4	Ningging village	Tuting	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8
5	Nyering village	Tuting	Per Drop More Crop	Drip Irrigation	2	2	4	4.8	1.2	1.2	1.2	1.2
6	Jido village	Tuting	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8
7	Migging HQ.	Tuting	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
8	Pango village	Tuting	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8
9	Mossing village	Tuting	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8
10	Palling HQ.	Tuting	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
11	Singing	Tuting	Per Drop More Crop	Drip Irrigation	2	2	4	4.8	1.2	1.2	1.2	1.2

12	Likor	Tuting	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8
13	Angging	Tuting	Per Drop More Crop	Drip Irrigation	2	2	4	4.8	1.2	1.2	1.2	1.2
14	Gelling HQ.	Tuting	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
15	Mayum village	Tuting	Per Drop More Crop	Drip Irrigation	1	1	4	2.4	0.6	0.6	0.6	0.6
16	Bishing village	Tuting	Per Drop More Crop	Drip Irrigation	2	2	4	4.8	1.2	1.2	1.2	1.2
17	Bona village	Tuting	Per Drop More Crop	Drip Irrigation	1	1	4	2.4	0.6	0.6	0.6	0.6
18	Kopu village	Tuting	Per Drop More Crop	Drip Irrigation	2	2	4	4.8	1.2	1.2	1.2	1.2
19	Singa HQ.	Payendum	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
20	Nyokong village	Payendum	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8
21	Payendum village	Payendum	Per Drop More Crop	Drip Irrigation	2	2	4	4.8	1.2	1.2	1.2	1.2
22	Yortung village	Payendum	Per Drop More Crop	Drip Irrigation	2	2	4	4.8	1.2	1.2	1.2	1.2
23	Mankota village	Payendum	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8
24	Tashi Goan village	Payendum	Per Drop More Crop	Drip Irrigation	2	2	4	4.8	1.2	1.2	1.2	1.2
25	Silipu village	Payendum	Per Drop More Crop	Drip Irrigation	2	2	4	4.8	1.2	1.2	1.2	1.2
26	Simuge village	Payendum	Per Drop More Crop	Drip Irrigation	1	1	4	2.4	0.6	0.6	0.6	0.6

27	Simuling village	Payendum	Per Drop More Crop	Drip Irrigation	1	1	4	2.4	0.6	0.6	0.6	0.6
28	Angachi village	Payendum	Per Drop More Crop	Drip Irrigation	1	1	4	2.4	0.6	0.6	0.6	0.6
29	Yingkiong HQ.	Yingkiong	Per Drop More Crop	Drip Irrigation	10	10	4	24	6	6	6	6
30	Gette	Yingkiong	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
31	Gobuk	Yingkiong	Per Drop More Crop	Drip Irrigation	8	8	4	19.2	4.8	4.8	4.8	4.8
32	Halleng	Yingkiong	Per Drop More Crop	Drip Irrigation	2	2	4	4.8	1.2	1.2	1.2	1.2
33	Pugging	Yingkiong	Per Drop More Crop	Drip Irrigation	8	8	4	19.2	4.8	4.8	4.8	4.8
34	Simong	Yingkiong	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
35	Jengging HQ.	Jengging	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
36	Bomdo village	Jengging	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
37	Janbo village	Jengging	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
38	Ramsing village	Jengging	Per Drop More Crop	Drip Irrigation	4	4	4	9.6	2.4	2.4	2.4	2.4
39	Gosang village	Jengging	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
40	Moying village	Jengging	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8
41	Karko village	Jengging	Per Drop More Crop	Drip Irrigation	6	6	4	14.4	3.6	3.6	3.6	3.6

42	Mariyang HQ.	Mariyang	Per Drop More Crop	Drip Irrigation	15	15	4	36	9	9	9	9
43	Damro	Mariyang	Per Drop More Crop	Drip Irrigation	12	12	4	28.8	7.2	7.2	7.2	7.2
44	Adi-pasi (sibuk)	Mariyang	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
45	Adi-pasi (Bine)	Mariyang	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
46	Adi-pasi (Sikko)	Mariyang	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
47	Milang	Mariyang	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
48	Dalbing	Mariyang	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
49	Peki-modi	Mariyang	Per Drop More Crop	Drip Irrigation	1	1	4	2.4	0.6	0.6	0.6	0.6
50	Kolung	Mariyang	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8
51	Geku HQ.	Geku	Per Drop More Crop	Drip Irrigation	10	10	4	24	6	6	6	6
52	Komkar	Geku	Per Drop More Crop	Drip Irrigation	10	10	4	24	6	6	6	6
53	Sumsing	Geku	Per Drop More Crop	Drip Irrigation	8	8	4	19.2	4.8	4.8	4.8	4.8
54	Sibum	Geku	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8
55	Jeru	Geku	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8
56	Pongging	Geku	Per Drop More Crop	Drip Irrigation	3	3	4	7.2	1.8	1.8	1.8	1.8

57	Padu	Geku	Per Drop More Crop	Drip Irrigation	5	5	4	12	3	3	3	3
58	Silli	Geku	Per Drop More Crop	Drip Irrigation	4	4	4	9.6	2.4	2.4	2.4	2.4
Grand Total					248	248		595.2	148.8	148.8	148.8	148.8

Annexure V: Strategic Action Plan by DRDA (RD) for Irrigation in Upper Siang District under PMKSY

SI No	Name of Block	Village	Activities	Total No of units	Command area (in Ha)	Period of implementation in year	unit cost per Ha	Estimated cost (in Rs)
1	2	3	4	5	6	7	8	9
1	YINGKIONG	Pugging	Farmpond	7	10.5	5 years	1,80,000.00	12,60,000.00
			Check dams	6	12	5 years	5,00,000.00	30,00,000.00
			Nallah bunds	10	10	5 years	2,00,000.00	20,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	11	16.5	5 years	3,50,000.00	38,50,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	10	20	5 years	5,00,000.00	50,00,000.00
			Providing infrastructure for irrigation					
			Land development					
		Gette	Farmpond	8	12		1,80,000.00	14,40,000.00
			Check dams	7	14		5,00,000.00	35,00,000.00

			Nallah bunds	11	11		2,00,000.00	22,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	11	16.5	5 years	3,50,000.00	38,50,000.00
			Water conservation	4	4.8	5 years	2,00,000.00	8,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	7	14	5 years	5,00,000.00	35,00,000.00
			Providing infrastructure for irrigation					
			Land development					
		Simong	Farmpond	12	18	5 years	1,80,000.00	21,60,000.00
			Check dams	11	22	5 years	5,00,000.00	55,00,000.00
			Nallah bunds	20	20	5 years	2,00,000.00	40,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	20	30	5 years	3,50,000.00	70,00,000.00
			Water conservation	5	6	5 years	2,00,000.00	10,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	20	40	5 years	5,00,000.00	100,00,000.00
			Providing infrastructure for irrigation					
			Land development					
		Gobuk	Farmpond	10	15	5 years	1,80,000.00	18,00,000.00
			Check dams	11	22	5 years	5,00,000.00	55,00,000.00
			Nallah bunds	15	15	5 years	2,00,000.00	30,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	13	19.5	5 years	3,50,000.00	45,50,000.00

			Water conservation	7	8.4	5 years	2,00,000.00	14,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	12	24	5 years	5,00,000.00	60,00,000.00
			Providing infrastructure for irrigation					
			Land development					
		Halleng	Farmpond	4	6	5 years	1,80,000.00	7,20,000.00
			Check dams	1	2	5 years	5,00,000.00	5,00,000.00
			Nallah bunds	5	5	5 years	2,00,000.00	10,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	2	3	5 years	3,50,000.00	7,00,000.00
			Water conservation	1	1.2	5 years	2,00,000.00	2,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
			Sub Total					868,30,000.00
2	JENGING	Karko	Farmpond	10	15	5 years	1,80,000.00	18,00,000.00
			Check dams	13	26	5 years	5,00,000.00	65,00,000.00
			Nallah bunds	12	12	5 years	2,00,000.00	24,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	14	21	5 years	3,50,000.00	49,00,000.00
			Water conservation	8	9.6	5 years	2,00,000.00	16,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	15	30	5 years	5,00,000.00	75,00,000.00
			Providing infrastructure for irrigation					

			Land development					
								-
		Jengging	Farmpond	14	21	5 years	1,80,000.00	25,20,000.00
			Check dams	12	24	5 years	5,00,000.00	60,00,000.00
			Nallah bunds	12	12	5 years	2,00,000.00	24,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	15	22.5	5 years	3,50,000.00	52,50,000.00
			Water conservation	4	4.8	5 years	2,00,000.00	8,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	20	40	5 years	5,00,000.00	100,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Gosang	Farmpond	12	18	5 years	1,80,000.00	21,60,000.00
			Check dams	10	20	5 years	5,00,000.00	50,00,000.00
			Nallah bunds	11	11	5 years	2,00,000.00	22,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	7	10.5	5 years	3,50,000.00	24,50,000.00
			Water conservation	8	9.6	5 years	2,00,000.00	16,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	10	20	5 years	5,00,000.00	50,00,000.00
			Providing infrastructure for irrigation					
			Land development					
		Ramsing	Farmpond	7	10.5	5 years	1,80,000.00	12,60,000.00
			Check dams	7	14	5 years	5,00,000.00	35,00,000.00

			Nallah bunds	8	8	5 years	2,00,000.00	16,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	6	9	5 years	3,50,000.00	21,00,000.00
			Water conservation	6	7.2	5 years	2,00,000.00	12,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	8	16	5 years	5,00,000.00	40,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Bomdo	Farmpond	9	13.5	5 years	1,80,000.00	16,20,000.00
			Check dams	6	12	5 years	5,00,000.00	30,00,000.00
			Nallah bunds	7	7	5 years	2,00,000.00	14,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	8	12	5 years	3,50,000.00	28,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	6	12	5 years	5,00,000.00	30,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Janbo	Farmpond	7	10.5	5 years	1,80,000.00	12,60,000.00
			Check dams	6	12	5 years	5,00,000.00	30,00,000.00
			Nallah bunds	9	9	5 years	2,00,000.00	18,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	10	15	5 years	3,50,000.00	35,00,000.00

			Water conservation	7	8.4	5 years	2,00,000.00	14,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					-
			Land development					
			Sub Total					1079,20,000.00
3	Geku	Komkar	Farmpond	12	18	5 years	1,80,000.00	21,60,000.00
			Check dams	10	20	5 years	5,00,000.00	50,00,000.00
			Nallah bunds	10	10	5 years	2,00,000.00	20,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	10	15	5 years	3,50,000.00	35,00,000.00
			Water conservation	3	3.6	5 years	2,00,000.00	6,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	9	18	5 years	5,00,000.00	45,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Geku	Farmpond	15	22.5	5 years	1,80,000.00	27,00,000.00
			Check dams	13	26	5 years	5,00,000.00	65,00,000.00
			Nallah bunds	14	14	5 years	2,00,000.00	28,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	14	21	5 years	3,50,000.00	49,00,000.00
			Water conservation	7	8.4	5 years	2,00,000.00	14,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	9	18	5 years	5,00,000.00	45,00,000.00
			Providing infrastructure for irrigation					

			Land development					
								-
		Sibum	Farmpond	8	12	5 years	1,80,000.00	14,40,000.00
			Check dams	7	14	5 years	5,00,000.00	35,00,000.00
			Nallah bunds	7	7	5 years	2,00,000.00	14,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	6	9	5 years	3,50,000.00	21,00,000.00
			Water conservation	3	3.6	5 years	2,00,000.00	6,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	8	16	5 years	5,00,000.00	40,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Sumsing	Farmpond	9	13.5	5 years	1,80,000.00	16,20,000.00
			Check dams	6	12	5 years	5,00,000.00	30,00,000.00
			Nallah bunds	6	6	5 years	2,00,000.00	12,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	5	7.5	5 years	3,50,000.00	17,50,000.00
			Water conservation	3	3.6	5 years	2,00,000.00	6,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	5	10	5 years	5,00,000.00	25,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Katan HQ	Farmpond	12	18	5 years	1,80,000.00	21,60,000.00
			Check dams	12	24	5 years	5,00,000.00	60,00,000.00

			Nallah bunds	11	11	5 years	2,00,000.00	22,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	10	15	5 years	3,50,000.00	35,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	8	16	5 years	5,00,000.00	40,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Padu	Farmpond	15	22.5	5 years	1,80,000.00	27,00,000.00
			Check dams	10	20	5 years	5,00,000.00	50,00,000.00
			Nallah bunds	15	15	5 years	2,00,000.00	30,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	14	21	5 years	3,50,000.00	49,00,000.00
			Water conservation	7	8.4	5 years	2,00,000.00	14,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	10	20	5 years	5,00,000.00	50,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Silli	Farmpond	9	13.5	5 years	1,80,000.00	16,20,000.00
			Check dams	6	12	5 years	5,00,000.00	30,00,000.00
			Nallah bunds	10	10	5 years	2,00,000.00	20,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	9	13.5	5 years	3,50,000.00	31,50,000.00

			Water conservation	7	8.4	5 years	2,00,000.00	14,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	9	18	5 years	5,00,000.00	45,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Jeru	Farmpond	9	13.5	5 years	1,80,000.00	16,20,000.00
			Check dams	8	16	5 years	5,00,000.00	40,00,000.00
			Nallah bunds	6	6	5 years	2,00,000.00	12,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	9	13.5	5 years	3,50,000.00	31,50,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	8	16	5 years	5,00,000.00	40,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Pongging	Farmpond	7	10.5	5 years	1,80,000.00	12,60,000.00
			Check dams	6	12	5 years	5,00,000.00	30,00,000.00
			Nallah bunds	8	8	5 years	2,00,000.00	16,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	6	9	5 years	3,50,000.00	21,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	5	10	5 years	5,00,000.00	25,00,000.00
			Providing infrastructure for irrigation					

			Land development					
			Sub Total					1454,30,000.00
4	Mariyang	Kolung	Farmpond	7	10.5	5 years	1,80,000.00	12,60,000.00
			Check dams	7	14	5 years	5,00,000.00	35,00,000.00
			Nallah bunds	8	8	5 years	2,00,000.00	16,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	9	13.5	5 years	3,50,000.00	31,50,000.00
			Water conservation	9	10.8	5 years	2,00,000.00	18,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	17	34	5 years	5,00,000.00	85,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Dalbing	Farmpond	10	15	5 years	1,80,000.00	18,00,000.00
			Check dams	10	20	5 years	5,00,000.00	50,00,000.00
			Nallah bunds	14	14	5 years	2,00,000.00	28,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	13	19.5	5 years	3,50,000.00	45,50,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	15	30	5 years	5,00,000.00	75,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Peki-Modi	Farmpond	2	3	5 years	1,80,000.00	3,60,000.00
			Check dams	1	2	5 years	5,00,000.00	5,00,000.00

			Nallah bunds	2	2	5 years	2,00,000.00	4,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	3	4.5	5 years	3,50,000.00	10,50,000.00
			Water conservation	1	1.2	5 years	2,00,000.00	2,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Mariyang hq	Farmpond	15	22.5	5 years	1,80,000.00	27,00,000.00
			Check dams	15	30	5 years	5,00,000.00	75,00,000.00
			Nallah bunds	20	20	5 years	2,00,000.00	40,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	14	21	5 years	3,50,000.00	49,00,000.00
			Water conservation	3	3.6	5 years	2,00,000.00	6,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	5	10	5 years	5,00,000.00	25,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Damro	Farmpond	15	22.5	5 years	1,80,000.00	27,00,000.00
			Check dams	10	20	5 years	5,00,000.00	50,00,000.00
			Nallah bunds	12	12	5 years	2,00,000.00	24,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	14	21	5 years	3,50,000.00	49,00,000.00

			Water conservation	3	3.6	5 years	2,00,000.00	6,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	13	26	5 years	5,00,000.00	65,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Adipasi-sibuk	Farmpond	15	22.5	5 years	1,80,000.00	27,00,000.00
			Check dams	10	20	5 years	5,00,000.00	50,00,000.00
			Nallah bunds	12	12	5 years	2,00,000.00	24,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	14	21	5 years	3,50,000.00	49,00,000.00
			Water conservation	4	4.8	5 years	2,00,000.00	8,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	13	26	5 years	5,00,000.00	65,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		adipasi-siko bine	Farmpond	12	18	5 years	1,80,000.00	21,60,000.00
			Check dams	10	20	5 years	5,00,000.00	50,00,000.00
			Nallah bunds	10	10	5 years	2,00,000.00	20,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	11	16.5	5 years	3,50,000.00	38,50,000.00
			Water conservation	6	7.2	5 years	2,00,000.00	12,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	17	34	5 years	5,00,000.00	85,00,000.00

			Providing infrastructure for irrigation					
			Land development					
			Sub Total					1346,80,000.00
5	Tuting	Mosing	Farmpond	7	10.5	5 years	1,80,000.00	12,60,000.00
			Check dams	6	12	5 years	5,00,000.00	30,00,000.00
			Nallah bunds	6	6	5 years	2,00,000.00	12,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	6	9	5 years	3,50,000.00	21,00,000.00
			Water conservation	5	6	5 years	2,00,000.00	10,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	15	30	5 years	5,00,000.00	75,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Migging	Farmpond	7	10.5	5 years	1,80,000.00	12,60,000.00
			Check dams	6	12	5 years	5,00,000.00	30,00,000.00
			Nallah bunds	10	10	5 years	2,00,000.00	20,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	10	15	5 years	3,50,000.00	35,00,000.00
			Water conservation	10	12	5 years	2,00,000.00	20,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	8	16	5 years	5,00,000.00	40,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Panggo	Farmpond	10	15	5 years	1,80,000.00	18,00,000.00

			Check dams	9	18	5 years	5,00,000.00	45,00,000.00
			Nallah bunds	10	10	5 years	2,00,000.00	20,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	11	16.5	5 years	3,50,000.00	38,50,000.00
			Water conservation	8	9.6	5 years	2,00,000.00	16,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	10	20	5 years	5,00,000.00	50,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Ningging	Farmpond	10	15	5 years	1,80,000.00	18,00,000.00
			Check dams	9	18	5 years	5,00,000.00	45,00,000.00
			Nallah bunds	10	10	5 years	2,00,000.00	20,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	12	18	5 years	3,50,000.00	42,00,000.00
			Water conservation	7	8.4	5 years	2,00,000.00	14,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	12	24	5 years	5,00,000.00	60,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Tuting	Farmpond	10	15	5 years	1,80,000.00	18,00,000.00
			Check dams	11	22	5 years	5,00,000.00	55,00,000.00
			Nallah bunds	11	11	5 years	2,00,000.00	22,00,000.00
			Percolation tanks					
			Other ground water recharge structure					

			Fishery ponds/ cattle pond	14	21	5 years	3,50,000.00	49,00,000.00
			Water conservation	6	7.2	5 years	2,00,000.00	12,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	19	38	5 years	5,00,000.00	95,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Jido	Farmpond	12	18	5 years	1,80,000.00	21,60,000.00
			Check dams	11	22	5 years	5,00,000.00	55,00,000.00
			Nallah bunds	13	13	5 years	2,00,000.00	26,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	8	12	5 years	3,50,000.00	28,00,000.00
			Water conservation	3	3.6	5 years	2,00,000.00	6,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	7	14	5 years	5,00,000.00	35,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Pokbir	Farmpond	4	6	5 years	1,80,000.00	7,20,000.00
			Check dams	4	8	5 years	5,00,000.00	20,00,000.00
			Nallah bunds	5	5	5 years	2,00,000.00	10,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	7	10.5	5 years	3,50,000.00	24,50,000.00
			Water conservation	3	3.6	5 years	2,00,000.00	6,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	4	8	5 years	5,00,000.00	20,00,000.00

			Providing infrastructure for irrigation					
			Land development					
								-
		Kugging	Farmpond	10	15	5 years	1,80,000.00	18,00,000.00
			Check dams	9	18	5 years	5,00,000.00	45,00,000.00
			Nallah bunds	11	11	5 years	2,00,000.00	22,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	15	22.5	5 years	3,50,000.00	52,50,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	13	26	5 years	5,00,000.00	65,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Ngamyang	Farmpond	18	27	5 years	1,80,000.00	32,40,000.00
			Check dams	11	22	5 years	5,00,000.00	55,00,000.00
			Nallah bunds	15	15	5 years	2,00,000.00	30,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	10	15	5 years	3,50,000.00	35,00,000.00
			Water conservation	8	9.6	5 years	2,00,000.00	16,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	9	18	5 years	5,00,000.00	45,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Tengo	Farmpond	2	3	5 years	1,80,000.00	3,60,000.00

			Check dams	2	4	5 years	5,00,000.00	10,00,000.00
			Nallah bunds	2	2	5 years	2,00,000.00	4,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	2	3	5 years	3,50,000.00	7,00,000.00
			Water conservation		0	5 years	2,00,000.00	-
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Nyering	Farmpond	3	4.5	5 years	1,80,000.00	5,40,000.00
			Check dams	2	4	5 years	5,00,000.00	10,00,000.00
			Nallah bunds	2	2	5 years	2,00,000.00	4,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	3	4.5	5 years	3,50,000.00	10,50,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Gome	Farmpond	3	4.5	5 years	1,80,000.00	5,40,000.00
			Check dams	2	4	5 years	5,00,000.00	10,00,000.00
			Nallah bunds	5	5	5 years	2,00,000.00	10,00,000.00
			Percolation tanks					
			Other ground water recharge structure					

			Fishery ponds/ cattle pond	4	6	5 years	3,50,000.00	14,00,000.00
			Water conservation	1	1.2	5 years	2,00,000.00	2,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Lali	Farmpond	3	4.5	5 years	1,80,000.00	5,40,000.00
			Check dams	2	4	5 years	5,00,000.00	10,00,000.00
			Nallah bunds	5	5	5 years	2,00,000.00	10,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	2	3	5 years	3,50,000.00	7,00,000.00
			Water conservation	1	1.2	5 years	2,00,000.00	2,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	1	2	5 years	5,00,000.00	5,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Rishing	Farmpond	9	13.5	5 years	1,80,000.00	16,20,000.00
			Check dams	5	10	5 years	5,00,000.00	25,00,000.00
			Nallah bunds	9	9	5 years	2,00,000.00	18,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	15	22.5	5 years	3,50,000.00	52,50,000.00
			Water conservation	1	1.2	5 years	2,00,000.00	2,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	5	10	5 years	5,00,000.00	25,00,000.00

			Providing infrastructure for irrigation					
			Land development					
								-
		Pekong	Farmpond	6	9	5 years	1,80,000.00	10,80,000.00
			Check dams	7	14	5 years	5,00,000.00	35,00,000.00
			Nallah bunds	7	7	5 years	2,00,000.00	14,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	8	12	5 years	3,50,000.00	28,00,000.00
			Water conservation	1	1.2	5 years	2,00,000.00	2,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	7	14	5 years	5,00,000.00	35,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Angging-Monge	Farmpond	7	10.5	5 years	1,80,000.00	12,60,000.00
			Check dams	7	14	5 years	5,00,000.00	35,00,000.00
			Nallah bunds	9	9	5 years	2,00,000.00	18,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	10	15	5 years	3,50,000.00	35,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	8	16	5 years	5,00,000.00	40,00,000.00
			Providing infrastructure for irrigation					
			Land development					
		Singing	Farmpond	7	10.5	5 years	1,80,000.00	12,60,000.00
			Check dams	7	14	5 years	5,00,000.00	35,00,000.00

			Nallah bunds	7	7	5 years	2,00,000.00	14,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	8	12	5 years	3,50,000.00	28,00,000.00
			Water conservation	3	3.6	5 years	2,00,000.00	6,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	3	6	5 years	5,00,000.00	15,00,000.00
			Providing infrastructure for irrigation					
			Land development					-
		Likor	Farmpond	10	15	5 years	1,80,000.00	18,00,000.00
			Check dams	11	22	5 years	5,00,000.00	55,00,000.00
			Nallah bunds	11	11	5 years	2,00,000.00	22,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	10	15	5 years	3,50,000.00	35,00,000.00
			Water conservation	6	7.2	5 years	2,00,000.00	12,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	7	14	5 years	5,00,000.00	35,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Palling	Farmpond	9	13.5	5 years	1,80,000.00	16,20,000.00
			Check dams	8	16	5 years	5,00,000.00	40,00,000.00
			Nallah bunds	8	8	5 years	2,00,000.00	16,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	10	15	5 years	3,50,000.00	35,00,000.00
			Water conservation	4	4.8	5 years	2,00,000.00	8,00,000.00

			Water harvesting					
			Creation of irrigation canals & drain	4	8	5 years	5,00,000.00	20,00,000.00
			Providing infrastructure for irrigation					
			Land development					
			Sub Total					2635,10,000.00
6	Payindam	Mayum	Farmpond	3	4.5	5 years	1,80,000.00	5,40,000.00
			Check dams	3	6	5 years	5,00,000.00	15,00,000.00
			Nallah bunds	4	4	5 years	2,00,000.00	8,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	4	6	5 years	3,50,000.00	14,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Bishing	Farmpond	5	7.5	5 years	1,80,000.00	9,00,000.00
			Check dams	5	10	5 years	5,00,000.00	25,00,000.00
			Nallah bunds	8	8	5 years	2,00,000.00	16,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	3	4.5	5 years	3,50,000.00	10,50,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					

								-
		Bona	Farmpond	5	7.5	5 years	1,80,000.00	9,00,000.00
			Check dams	5	10	5 years	5,00,000.00	25,00,000.00
			Nallah bunds	6	6	5 years	2,00,000.00	12,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	3	4.5	5 years	3,50,000.00	10,50,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Kopu	Farmpond	4	6	5 years	1,80,000.00	7,20,000.00
			Check dams	5	10	5 years	5,00,000.00	25,00,000.00
			Nallah bunds	5	5	5 years	2,00,000.00	10,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	3	4.5	5 years	3,50,000.00	10,50,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Gelling	Farmpond	9	13.5	5 years	1,80,000.00	16,20,000.00
			Check dams	8	16	5 years	5,00,000.00	40,00,000.00
			Nallah bunds	9	9	5 years	2,00,000.00	18,00,000.00

			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	10	15	5 years	3,50,000.00	35,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Norbudling	Farmpond	8	12	5 years	1,80,000.00	14,40,000.00
			Check dams	9	18	5 years	5,00,000.00	45,00,000.00
			Nallah bunds	9	9	5 years	2,00,000.00	18,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	4	6	5 years	3,50,000.00	14,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Nyokkong	Farmpond	4	6	5 years	1,80,000.00	7,20,000.00
			Check dams	4	8	5 years	5,00,000.00	20,00,000.00
			Nallah bunds	5	5	5 years	2,00,000.00	10,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	4	6	5 years	3,50,000.00	14,00,000.00

			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Payindam	Farmpond	4	6	5 years	1,80,000.00	7,20,000.00
			Check dams	4	8	5 years	5,00,000.00	20,00,000.00
			Nallah bunds	5	5	5 years	2,00,000.00	10,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	5	7.5	5 years	3,50,000.00	17,50,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Yorteng	Farmpond	3	4.5	5 years	1,80,000.00	5,40,000.00
			Check dams	2	4	5 years	5,00,000.00	10,00,000.00
			Nallah bunds	2	2	5 years	2,00,000.00	4,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	2	3	5 years	3,50,000.00	7,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					

			Land development					
								-
		Mankota-Deokota	Farmpond	4	6	5 years	1,80,000.00	7,20,000.00
			Check dams	4	8	5 years	5,00,000.00	20,00,000.00
			Nallah bunds	5	5	5 years	2,00,000.00	10,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	4	6	5 years	3,50,000.00	14,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Tashi Gaon	Farmpond	5	7.5	5 years	1,80,000.00	9,00,000.00
			Check dams	5	10	5 years	5,00,000.00	25,00,000.00
			Nallah bunds	6	6	5 years	2,00,000.00	12,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	8	12	5 years	3,50,000.00	28,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Sillipu-Simuge	Farmpond	2	3	5 years	1,80,000.00	3,60,000.00

			Check dams	2	4	5 years	5,00,000.00	10,00,000.00
			Nallah bunds	2	2	5 years	2,00,000.00	4,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	2	3	5 years	3,50,000.00	7,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Singa (old & new)	Farmpond	6	9	5 years	1,80,000.00	10,80,000.00
			Check dams	6	12	5 years	5,00,000.00	30,00,000.00
			Nallah bunds	7	7	5 years	2,00,000.00	14,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	8	12	5 years	3,50,000.00	28,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Simuling-Angachi	Farmpond	2	3	5 years	1,80,000.00	3,60,000.00
			Check dams	2	4	5 years	5,00,000.00	10,00,000.00
			Nallah bunds	2	2	5 years	2,00,000.00	4,00,000.00
			Percolation tanks					

			Other ground water recharge structure					
			Fishery ponds/ cattle pond	2	3	5 years	3,50,000.00	7,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
								-
		Silage	Farmpond	2	3	5 years	1,80,000.00	3,60,000.00
			Check dams	2	4	5 years	5,00,000.00	10,00,000.00
			Nallah bunds	2	2	5 years	2,00,000.00	4,00,000.00
			Percolation tanks					
			Other ground water recharge structure					
			Fishery ponds/ cattle pond	2	3	5 years	3,50,000.00	7,00,000.00
			Water conservation	2	2.4	5 years	2,00,000.00	4,00,000.00
			Water harvesting					
			Creation of irrigation canals & drain	2	4	5 years	5,00,000.00	10,00,000.00
			Providing infrastructure for irrigation					
			Land development					
			Sub Total					1036,80,000.00
							Grand Total	8420,50,000.00

Annexure VI: Financial Pattern and Revised Cost Norms for Cad&Wm Programme for All States during XII Plan

Sl. No.	Component	Revised Cost Norm (central share) for XII Plan
1	2	3
a).	Survey, Planning and designing of OFD Works	50% of actual expenditure or Rs.600/ha whichever is less.(Assumed cost norm of Rs.1,200/ha)
b).	On-Farm Development (OFD) Works [comprising of construction of field channels and also land leveling/shaping & realignment of field boundaries, where necessary; extension, renovation & modernization and micro irrigation]	
	(i) Construction of lined filed channels /underground pipelines.	50% of actual expenditure or Rs.17,500/- per ha., for construction of lined channels including allied structures like cistern, measuring devices, drop structures, division boxes,turnouts, flumes, culverts, nverted siphons, unlined field channels etc. (Assumed cost is Rs.35,000/- per ha). or 50% of actual expenditure or Rs.22,500/- per ha., for construction of lined channels including allied structures like cistern, measuring devices, drop structures, division boxes, turnouts, flumes, culverts, inverted siphons, unlined field channels etc., underground pipelines, sumps with allied structures with adoption of Micro-irrigation systems in the commands with volumetric measurement of water covering entire command. The proposal supported with cost norms of executing project can be approved at the level of Minister (WR, RD&GR). (Assumed cost is Rs.45, 000/- per ha).
	ii) Mechanised land leveling in the hilly/difficult areas, laser land leveling in the selected areas	50% of actual expenditure or Rs.25, 000/- per ha whichever is less. (Assumed cost is Rs.50, 000/- per ha).

	iii) Micro-irrigation in at least 10% area of CCA of each project or 40 hectares, whichever is maximum? Cost of Infrastructure (grid power/solar power & pump, HDPE pipelines, sump etc) :	Rs.25000/ha or 50% of actual expenditure whichever is less. (Estimated Cost of infrastructure is Rs.50, 000/- per ha) ¹ . Construction of infrastructure for micro-irrigation (MI) is covered as a replacement of OFD works.
c).	Construction of Field, intermediate and link drains.	50% of actual expenditure or Rs.3, 000/ha whichever is less. (cost norm Rs.6,000/ha), which may be explored for convergence with the MGNREGA, in case of earth works
d).	Correction of system deficiencies in systems of capacity up to 4.25 cumec (150 cusec)	50% of actual expenditure or Rs.4,000/ha whichever is less as central assistance (Cost norm is Rs.8,000/- per ha), which may be explored for convergence with the MGNREGA, in case of earth works
e).	Reclamation of water logged areas (i) Surface drainage ² (ii) Sub-surface drainage	50% of actual expenditure or Rs.10, 000/ ha whichever is less (assumed cost is Rs.20, 000/- per ha), which may be explored for convergence with the MGNREGA, in case of earth works. 50% of actual expenditure or Rs.25, 000/- ha. Whichever is less (assumed cost is Rs.50, 000/- per ha.), which may be explored for convergence with the MGNREGA, in case of earth works.

Cost may vary according to site & soil conditions, type of crops and design based on requirement. Formation of WUAs would be mandatory before implementation of MI. A price control mechanism would be decided by WUAs, Central & State Governments. Use of ground water would also be applicable in implementation of MI/minor irrigation projects. Farmers would bear the cost of sprinkler/drip sets/ laterals or avail the subsidies available in extant scheme under Ministry of Agriculture.

² Surface drainage includes reclamation through Bio-drainage as well.

f).	Onetime grant to registered / elected WUAs (i) Functional grant (Rs. per ha.) (ii) Infrastructure grant (Rs. Per WUA)	Rs.1, 200/- per ha (Rs.540:540:120 ³ among Centre: State: farmers). Rs.2.25 lakh or 75% of actual expenditure, whichever is less. (Assumed total cost is Rs.3 lakh), (till new funding pattern is approved).
g).	Software activities namely training, monitoring, evaluation, demonstration (including on micro irrigation, mechanized/laser land leveling, water use efficiency) and adaptive trials ⁴ .	75% central funding. 25% has to be borne by States, (till new funding pattern is approved).

h).	One time financial assistance to 13 WALMIs/IMTIs for strengthening of infrastructure	75% central funding and 25% to be borne by States, (till new funding pattern is approved). Limited financial assistance to each institute will be provided subject implementation of water sector reforms by the respective States, against the proposal given by the WALMIs/ IMTIs for implementation of prescribed components of the CAD&WM programme.
i).	Establishment Cost [limited to 10% of the total central assistance for the items at Sl. No. (b), (c), (d) and (e)]	50% of the actual administrative expenses (limited to 10% of the total central assistance for the items at Sl. No. (b), (c), (d) and (e)).

3A minimum of Rs.120/- per ha is to be realized from the beneficiary farmers, in case of one time functional grant to registered WUAs.

4In each State, one or two WUAs to take up the use of smart card in distribution of water ensuring pre-payment of water charge and guarantee of adequate water entitlement in their operational area on pilot basis under adaptive trial.

No.G-11012/3/2013-CADWM
Government of India
Ministry of Water Resources, River Development and Ganga Rejuvenation
SP WING (SP-III)

438, Krishi Bhawan
New Delhi, dated 17th September, 2015

To
The Principal Secretaries / Secretaries-in-charge of
CAD&WM Programme (as per list enclosed)

Subject: Revised Interim Guidelines of Command Area Development and Water Management (CAD&WM) Programme for the XII Plan.

Sir,

The Cabinet Committee on Economic Affairs has approved the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) on 1.7.2015 and its Operational Guidelines have already been circulated by Ministry of Agriculture & Farmers Welfare, Government of India on 30th July, 2015. CAD&WM programme is to be implemented under PMKSY (Har Khet Ko Pani). Revised Interim Guidelines for implementation of CADWM programme during XII Plan duly approved by the competent authority on 10th September, 2015 are enclosed.

Yours faithfully,

Encl: As above.

(J.R. BORO)
Senior Joint Commissioner (SP-III)
Tel/Fax: 23383090

Copy to:

- 1) Commissioners / Administrators of CADAs (as per list enclosed).
- 2) Directors of all WALMIs / IMTIs (as per list enclosed).

Copy also to:-

- 1) Adviser to the Hon'ble Minister (WR,RD&GR), New Delhi
- 2) PS to the Hon'ble Minister (WR,RD&GR), New Delhi
- 3) PS to the Hon'ble Minister of State (WR,RD&GR), New Delhi
- 4) Sr.PPS to the Secretary (WR,RD&GR), New Delhi.
- 5) PS to Special Secretary (WR,RD&GR), New Delhi.
- 6) Chairman, Central Water Commission, Sewa Bhawan, New Delhi
- 7) Joint Secretary & Financial Adviser (WR,RD&GR), New Delhi
- 8) Joint Secretary (A&GW), MoWR,RD&GR, New Delhi
- 9) Joint Secretary (PP), MoWR,RD&GR, New Delhi
- 10) Chairman, Central Ground Water Board, Faridabad
- 11) Adviser (WR), NITI Aayog, New Delhi.
- 12) CE(PMO), CWC, Sewa Bhawan, R.K.Puram, New Delhi
- 13) CEs of field organizations of CWC (as per list enclosed)
- 14) Directors (Mon & Appraisal) of field offices of CWC (as per list enclosed).
- 15) Director (e-Governance), MoWR,RD&GR for uploading in website of the Ministry.