DISTRICT IRRIGATION PLAN

Kamrup Rural, Assam

NABCONS

District Irrigation Plan
for
5 YEARS
2016-2021
Kamrup Rural, Assam

Table of Contents

List of Tables

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 over extraction 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 LokSabha 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 'JalSanchay' and 'JalSinchan', we will nurture

water conservation and ground water recharge. Micro irrigation will be popularized 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, 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 VikasY ojana (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 (HarKhetKoPani), 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: Kamrup Rural district which is situated at the plains of the Brahmaputra Valley is located between 25°43'and 26°51' N Latitude and 90°36' – 92°12' E Longitude. The district is now having an area of 3105sq km consisting of 1no.s Civil Sub-division,5no.s Revenue circle, 3nos. Community Development Blocks 316 villages.

Agriculture in Kamrup Rural: It has been observed from records of Revenue department in the district that the Gross Cropped Area is 176824 hectare out of which 28948 hectare and 23438 hectare i.e. around 16.4% and 13.3% of the area falls in Boko and Chamaria Blocks respectively. Boko and Hajo Blocks record for the maximum net sown area of 28348 hectare and 20975 hectares i.e. around 18.2% and 13.5% of the net sown area of the district respectively. The cropping intensity in Chayani block is 143% which is highest among other blocks in the district. For rest of the blocks, the average cropping intensity is 114%.

District Water Profile: The district occupies part of the basin formed by mighty river Brahmaputra passing through the central part with a westerly course. The perennial tributaries like Puthimari, Digaru, Kulsi,

Singra etc. drain the district and join the River Brahmaputra.
The ground water level rests at shallow depth and in major part, it rests between 2- 5 m bgl during pre-monsoon period. The study of long term water level trend shows no significant change inwater level in the last 10 years.

PMKSY Financial Proposal: Total plan of Kamrup Rural district for four years works out to be Rs 1061.1 crores (Table 5.2). Maximum share in the proposal is of INR 799.6 crores (75.4%) by the irrigation department which is followed by the Agriculture Department with a budget of Rs. 174.4 crores (16.4%), while Soil Conservation has a share of 8.2% which amounts to Rs 87.1 crores.

Expected Outcome: The gross irrigated area in the district is 53190.7 ha which amounts to 30% of the gross cropped area of 176824 ha. Various departments of the district have proposed to bring additional acreage of land under irrigated cultivation system. As the water requirement of crops for the existing cropping pattern works out to be 1089MCM and if the gross cropped area is to be brought under irrigated area, 777.4 MCM additional water is required. Keeping in view the above, a plan to develop irrigation potential of 122715 ha has been proposed under Strategic Action Plan (2016-2020) of Kamrup Rural district.

INTRODUCTION

1. 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 organizations and stakeholders.
- To enable optimum utilization 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, urbanization 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 study2on the demand for 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

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

[2]Amarasinghe, U.A., Shah T., Turral, 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.

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 Utilized (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:

(i) 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.

(ii) Principle of equity and social justice must inform use and allocation of water.

(iii) 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.

(iv) 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.

(v) Water is essential for sustenance of eco-system, and therefore, minimum ecological needs should be given due consideration.

(vi) 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,

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

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.

(vii) 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.

(viii) 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.

(ix) 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.

(x) 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.

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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.

1. Vision

The overreaching 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.

2. 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 (HarKhetkoPani),
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.

3. 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 JalMandir (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.

4. Programme Components

PMKSY has following four components:

Accelerated Irrigation Benefit Programme (AIBP)

a) To focus on faster completion of ongoing Major and Medium Irrigation including National Projects.

PMKSY (HarKhetkoPani)

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 (JalSanchay); 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.

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 (JalSinchan); 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 (HarKhetkoPani), 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 maximize use of available water including rainfall and minimise irrigation requirement (JalSarankchan); 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.

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

1. Rationale / Justification

In reference to the status and need of irrigation, the water resource management including irrigation related priorities was identified for Bilaspur 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 RashtriyaKrishiVikasYojana (RKVY), Potential Linked Credit Plans (PLP) of NABARD and the Integrated District Development Plan etc. identified number of irrigation related issues for Bilaspur district including (i) promoting water use efficiency through sprinkler and drip irrigation; (iii) promoting protected polyhouse cultivation to minimize risk factors and enhance quality and productivity; (iv) Improvement of on-farm water delivery and efficiency of existing irrigation systems; (v) promotion of soil conservation of arable & non-arable land through engineering measures; (vi) creation of new water harvesting structures, check dams, ponds, tanks, etc (vii) increase the forest cover in the district and (viii) land improvement measures.

2. Methodology

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

- Collection of primary and secondary data from field from various sources including published documents and websites.
- Meetings with various State Government departments and related institutions were held
- Meeting through VC was also held with State Level authorities.
- GIS maps of the area's/clusters were studied to understand the land morphology, topography of the district.
- Focused group discussions and interaction with of 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.
- Discussion with NABARD officer of Kamrup Rural 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 five years from 2016-17 to 2020-21 as detailed in the plan.

CHAPTER I

General information of the District

1.1 District Profile

Kamrup district is situated in the Brahmaputra valley region of Assam. The Kamrup district has undergone jurisdictional changes during the last decade. At present, Kamrup district consists of two sub-divisions. They are namely Guwahati Sub-division and Rangia sub-division. Kamrup district comprises 12 revenue Circles with 1068 villages. It has 14 Community Development Blocks within the district. The total area in the district is 3105 Sq.Km

The district Kamrup Rural was created by bifurcating the old Kamrup district on 3rd February 2003. Kamrup Rural District is one of the main district of Assam. The district is now a small area in the western part of Assam, with a distinctive native Kamrupi culture and dialect.

Location and Geographical Unit:

Kamrup District is situated between 25.46 and 26.49 North Latitude and between 90.48& 91.50 East Longitude.

The District is bounded by Udalguri district and Baska District in the north and by Meghalaya in the South. Its Eastern border is surrounded by Darrang District and Kamrup Metropolitan District while in the West, its adjacent to Goalpara District and Nalbari District.

Figure 1.1: District map of Kamrup Rural

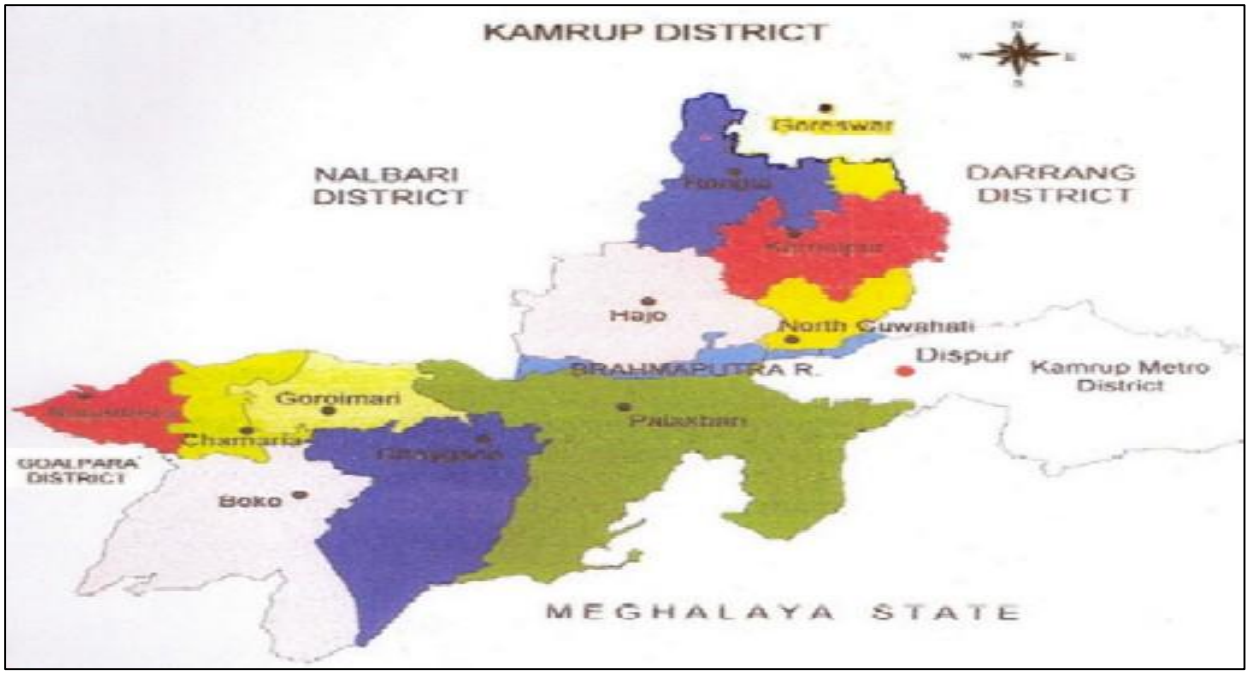


Table 1.2: District Profile of Kamrup

District Profile				
Sr. No	Name of District	District Code	Latitude	Longitude
1	Kamrup Rural	321	25°46'and 26°49' N	90°48' and 91°50' E

Source: Census of India, Kamrup Rural

District Background

Kamrup named after Kamarupa, a name by which Assam was previously known in ancient times. The district was originally comprised with parts of present Kamrup (M), Barpeta, Nalbari and Baksa district which got subsequently bifurcated into different independent districts. The districtis now a small area in the western part of Assam, with a distinctive native Kamrupi culture and dialect. The distinctive dialect etc. are however, shared with the present administrative districts of Nalbari and Barpeta, these districts being part of an un-divided Kamrup before the 1980s. Assam has been referred to as Kamrup in many of the ancient Indian literature. It was also known as Pragjyotishpur due to the astrology (JyotishShashtra) practices that prevailed in this part of the country during that time. However, "Kamrup" became a more predominant name in the later part of the history. Today Kamrup is an administrative district of Assam with its headquarters located at Amingaon. The greater parts of the district consist of wide plains, through the lower portion of which the river Brahmaputra flow a steady course from east to west.

Administrative Set-up of Kamrup Rural

The Deputy Commissioner of the District is the overall in charge of the administration of the entire district. He also acts as the Collector in case of Revenue matters, as a District Magistrate in case of maintenance of Law and Order and General Administration, as a District Election Officer in case of conduct of Election, as a Principal Census Officer while conducting Census, and so on. A number of Officers, like Additional Deputy Commissioners, Sub-divisional Officers, Extra Assistant Commissioners and others assist the Deputy Commissioner is looking after the administration of the district. At lower level each sub-division is headed by one Sub-Divisional Officer whereas under him there will be Revenue Circle Officers for each revenue circles who are responsible for the entire administration of the area under their respective revenue circle.

1.2 Demography

As per the 2011 census, the total population of the district is **14,84,028** out of which male population is **7,61,526** and female population is **7,23,202.**The scheduled caste population is**1,07,827** and scheduled tribe is **1**,**83,038.** The population density is **489** per square kilometre.

Table 1.2: Demography of Kamrup

Block	Total NHH*	Total NM*	Male	Female	CH* (0-6 Yrs)
Bezera	17927	83860	43463	40397	8463
Bihdia-Jajikona	22939	108401	55634	52767	11127
Boko	23509	111180	56415	55465	14325
Bongaon	11066	54651	27657	26994	7770
Chamaria	38101	204884	105268	99616	38320
Chayani	20825	97406	49557	47849	9552
Chaygaon	16630	79282	40403	38879	9135
Goroimari	21741	122082	62107	59975	25384
Hajo	37607	193980	99920	94060	26577
Kamalpur	21639	91056	47936	43120	8652
Rampur	20150	97709	50071	47638	11852
Rangia	28567	132000	68583	63417	14898
Rani	8409	38986	19829	19157	4408
Sualkuchi	14755	68551	34683	33868	6341
Total	**303865**	**1484028**	**761526**	**723202**	**196804**

Source: Census of India, Kamrup Rural, 2011

**M- Male, F- Female, CH- Children 0-6 years, NHH- No. of households, NM- No. of members*

1.3 Biomass and Livestock

Livestock is the integral part of the mixed-farming system that characterizes agriculture in Assam. Besides contributing to food and crop production, livestock and poultry are as important as savings. For many poor households, livestock is a daily source of earning and is an insurance against adversity. Animal traction is still significant in the State because of the increasing miniaturization of landholdings and high fuel cost that limits use of machinery. Tractor density per hectare of cultivated area is 1/6 the India average. Being a State with limited benefits of green revolution technologies and climatic uncertainties, livestock has the potential to contribute to farm diversification and intensification. Livestock products are integral parts of local diet as more than 95 percent of the population is non-vegetarian.

Livestock production in Assam is characterized by rural smallholder production using indigenous cattle, buffalo, pigs, goats and chicken. There are pockets of nomadic systems of rearing, mostly in the fringes of the forests. In recent years, more specialized and commercially intensive production areas have emerged where farmers are using improved livestock and commercial poultry strains. Livestock in the State is largely fed on crop residues, food waste, while high-producing animals are supplemented with concentrated grain-based feed. Unlike in rest of India, where cooperative farming has revolutionized livestock sector, investment in cooperative farming has remained largely unsuccessful.

Livestock Population

As per the latest census (2012), the district has a total livestock population of 10.6 lakhs out of which there are 450425 crossbred cows, 70910 indigenous cows and 19352 buffaloes.

Table 1.3(a): Biomass and live stock of Kamrup Rural

Block	Poultry (No.)	Ducks (No.)	Pigs (Nos.)	Goats (Nos.)	Sheeps (Nos.)
Total	336437	163892	68455	175323	28907

Source: Sample Survey 2012-13, Kamrup

Table 1.3(b): Biomass and live stock of Kamrup Rural

Block	Indigenous Cow (Nos.)	Hybrid Cow (Nos.)	In Descriptive Buffalo (Nos.)	Hybrid Buffalo (Nos.)	Any other Milch or Meat Animal (Nos.)	Draft Animal (Buffalo/yak/bulls/any other (Nos.)
Total	450425	70910	19352	_	_	_

Source: Statistical Hand Book, Kamrup Rural

1.4 Agro-Ecology, Climate, Hydrology and Topography

Climate

The climate of the area has been classified as sub-tropical humid climate with heavy rainfall, hot summer and high humidity. Average temperature ranges from 12 to 38°C during the year. In winter, temperature ranges from 15 to 25°C during day and 8 to 15°C during night. The summer temperature ranges from 25 to 38°C during day and 15 to 25°C during night.

Average annual rainfall of the district is 1752 mm and co-efficient of variation is 15.3%. The annual normal rainfall of the district as compiled from IMD data is 2125.4 mm with 96.5 rainy days.

Hydrology

The area consists of two broad hydrogeological units – 1) Pre-Cambrian consolidated rocks and 2) Quaternary alluvium consisting of unconsolidated sediments (Plate-2).

Pre-Cambrian consolidated rocks are confined to hilly areas and inselbergs, where ground water occurs in shallow weathered zone and this can be developed through open wells. The joints and fractures developed due to tectonic activities form potential water bearing zones and suitable for development through construction of bore wells. The district has a more or less plain topography, some hillocks are found elsewhere. It has a gentle slope from northern side towards south direction.

Table 1.4(a): Agro Ecology, Climate, Hydrology and Topography of Kamrup Rural

S. No	Block name	Agro Ecological Zone Type	Type of Terrain	District Area (ha)	Normal Annual Rainfall (mm)	Average Monthly Rainfall (mm)	No. of RainyDays (No)
2	Bezera						
3	Bihdia-Jajikona						
1	Boko	Lower BharamaputraValley Zone	Plain to semi hilly terrain	33475.02 ha	2818 mm	145mm	145 no
	Bongaon						
	Chamaria						
	Chayani						

	Chaygaon						
	Goroimari						
	Hajo	Eastern Himalayan Zone	Plain	26916	1380	258	160
	Kamalpur						
	Rampur						
	Rangia						
	Rani						
	Sualkuchi						

Source: IMD

Table 1.4(b): Agro Ecology, Climate, Hydrology and Topography of Kamrup Rural

Blocks	Maximum Rainfall Intensity(mm)			Average Weekly Temperature (°C)									Potential Evapo-Transpiration (PET)				Elevation		
				Period									Period						
				Summer (April-May)			Winter (Oct.-Mar.)			Rainy (June-Sept.)									
	Upto 15 Min	Beyond 15 but upto 30 Min	Beyond 30 but upto 60 Min	Min.	Max.	Mean	Min.	Max.	Mean	Min.	Max.	Mean	Summer	Winter	Rainy season	Cumulative Total	Min.	Max.	Mean
Bezera																			
Bihdia-Jajikon																			

a																			
Boko				23	30	26.5	10	20	15	25	35	30	2.5 mm	0.4 mm	3.0 mm	2.95 mm			
Bongaon																			
Chamaria																			
Chayani																			
Chayggaon																			
Goroimari																			
Hajo	20	32	92	28	36	32	12	20	16	22	32	27	.5/ Hr	.2/ Hr	.1/ Hr	.8/Hr	46	54	50
Kamalpur																			
Rampur																			
Rangia																			
Rani																			
Sualkuchi																			

Source: IMD

1.5 Soil Profile

The different rock formation occurring in the district has been subjected to various soil forming processes through agents of weathering and transportation during different geological ages. Soils comprising various proportions of sand, silt, clay and organic material in the district are grouped into three broad categories – a) newer alluvial soil, b) valley fill/older alluvial soil and c) soils over forest and hilly terrain.

Table 1.5: Soil profile of Kamrup Rural

Sr. No.	Name of Taluka	Soil Type	Area (ha)	Land Slope			
		Major Soil Classes		0-3% (ha)	3-8% (ha)	8-25% (ha)	>25% (ha)
1	Bezera						
2	Bihdia-Jajikona						
3	Boko	Fine Silty type Udifluvents	23761	28082	1543	926	308
		Coarse silty, MollicFluveaquent	4629				
		Fine Loamy typicDystrochrepts	1543				
		Unclassed /Other	926				
4	Bongaon						
5	Chamaria						
6	Chayani						
7	Chaygaon						
8	Goroimari						
9	Hajo	Alluvial	24135	1450	NIL	NIL	NIL
10	Kamalpur						
11	Rampur	Alluvial soil	16546.1	16546.1	NIL	NIL	NIL
12	Rangia						
13	Rani						
14	Sualkuchi						

Source: NBSS & LUP & Soil Survey Office

- 0-3% :- Level to very gentle sloping plain
- 3-8% :- gentle slopping plain
- 8-25% :- moderately sloping to moderately steeply sloping
- >25% :- steeply sloping to very steeply sloping

1.6 Soil Erosion and Runoff Status

Soil erosion is a naturally occurring process that affects all landforms. In agriculture, soil erosion refers to the wearing away of a field's topsoil by the natural physical forces of weather and wind or through forces associated with farming activities such as tillage.

In Kamrup Rural district, soil movement by rainfall (raindrop splash) is an important factor and floods accompanied with soil erosion and sand deposition causes maximum damage to standing crops of the agricultural lands in the district and as a result the soils are subjected to severe soil erosion during rainy season.

1.7 Land use Pattern

The total geographical area (TGA) of Kamrup Rural District is 310500 hectare. The largest Block of the district is Boko which comprises of a TGA of 33475 hectare i.e. about 10.8% of the TGA of the district.

Table 1.7(a): Land use pattern in Kamrup Rural District

Sr no	Name of the G.P	TGA (in hactre)	Area under Agril in (ha)				Area under forest in (ha)	Area under waste land (ha)	Area under other uses (ha)
			GCA (ha)	NSA in(ha)	AST	CI(%)			
1	Bezera	15076	4840	4785	55	101%	880.5	572.9	5410.1
2	Bihdia-Jajikona	16269	14912	13472	1440	111%	617.6	417.5	3900.1
3	Boko	33475	28948	28348	600	102%	3328	3744	248
4	Bongaon	8858	6956	5629	1327	124%	166.3	267.4	3193.8
5	Chamaria	25324	23438	19942	3496	118%	958.4	623.6	5889.3
6	Chayani	14122	9679	6778.4	78.9	143%	536.1	362.4	4253.3
7	Chaygaon	11362	6604	6023.5	580.5	110%	663.6	431.8	4077.4
8	Goroimari	16116	9560	7813	1747	122%	22.7	94.2	8215.3
9	Hajo	25117	23062	20975	2087	110%	953.5	744.3	3575.6
10	Kamalpur	14344	8450	7970	480	106%	674	225.4	1804.2
11	Rampur	16546	12473	9412.82	3100.9	133%	72.2	1016.3	5570.2
12	Rangia	17913	15925	13077	2651	122%	1238	0	2960
13	Rani	7930	5447.2	5233.1	214.1	104%	608.2	151.2	1734.5
14	Sualkuchi	8339	6530	6030	500	108%	487	316.9	2992.6
Total		**310500**	**176824.2**	**155488.8**	**18357.4**	**114%**	**11206.1**	**8967.9**	**53824.4**

Source: Department of Agriculture, Kamrup Rural
TGA- Total Geographical Area, GCA- Gross Cropped Area, NSA- Net Sown Area, AST- Area Sown more than once, CI- Cropping Intensity

Land use pattern of Kamrup Rural District comprising with 14 number Blocks are given below:

1.7(b): Land use pattern in Kamrup Rural District (in ha)

1.	Total Geographical Area	-	**310500**
2.	Total Area under Forest	-	**11206.1**
3.	Net Cultivable Area	-	**155488.8**
4.	Gross Cultivable Area	_	**176824.2**
5.	Total Area under Waste Land	-	**8967.9**
6.	Total Area under other uses	-	**53824.4**

Source: Department of Agriculture, Kamrup Rural

Chapter 2

District Water Profile

2.1 Area Wise, Crop-Wise Irrigation Status

A large portion of the area in Kamrup Rural District is mostly rainfed as the District has been blessed with heavy rainfall during Kharif season. However there is need and scope to improve irrigation facility to increase Cropping Intensity.

Table 2.1(a): Area wise, crop wise irrigation status

Crop Type	Kharif (Area in ha.)			Rabi (Area in ha.)			Summer Crop (Area in ha.)		
	Irrigated	Rainfed	Total	Irrigated	Rainfed	Total	Irrigated	Rainfed	Total
Cereals	15349.7	57129.5	72479.2	8494	10983	19477	14498	2351	16849
Coarse Cereals	5	295	300	297	487	784	65	629	694
Pulses	188	414	602	1544	3584	5128	0	984	984
Oil Seeds	5	213	218	1823	15199	17022	0	0	0
Fibre	0	4063	4063	0	2200	2200	0	77	77
Any Other Crop	43	2511	2554	2276	1063	3339	8	87	95
Total	**15590.7**	**64625.5**	**80216.2**	**14434**	**33516**	**47950**	**14571**	**4128**	**18699**

Table 2.1(b): Area wise, crop wise irrigation status

Crop Type	Horti & Plantation (Area in ha.)			Total		
	Irrigated	Rainfed	Total	Irrigated	Rainfed	Total
Cereals	6268	17703	23971	44609.7	88166.5	132776.2
Coarse Cereals	0	0	0	367	1411	1778
Pulses	0	0	0	1732	4982	6714
Oil Seeds	0	0	0	1828	15412	17240
Fibre	0	0	0	0	6340	6340
Any Other Crop	2327	3661	5988	4654	7322	11976
Total	**8595**	**21364**	**29959**	**53190.7**	**123633.5**	**176824.2**

Source: Department of Agriculture, Kamrup Rural

In Kamrup Rural, 53190.7 hectare of area is irrigated which accounts for 30% out of a total of176824.2 hectare of total cultivated land. Out of this irrigated area, cereals crops are cultivated in15349.7hectare in Kharif, 8494 ha in Rabi and in summer, a total of 16849 hectare area is cultivated with 14498 hectares under irrigated category.

2.2 Production and Productivity of Major Crops

Paddy, which is at present grown mainly during kharif seasons, dominates the agriculture scenario in the district of which winter (Sali) rice occupies the maximum area, followed by autumn (Ahu) rice and summer (Rabi) rice. Crops like Arahar, Black gram are grown as secondary crop during Kharif. Major area is in rainfed condition. Pulse crops like Pea and Lentil and Oil seed crops such as Mustard, Sesame, Linseed are major Rabi crops of the District. During summer some areas is covered with Summer Paddy in irrigated condition.

Table 2.2: Crop Production and Productivity

Production & productivity	Kharif		Rabi		Summer		Total	
Crops	Production (t)	Productivity (kg/ha)	Production (t)	Productivity (kg/ha)	Production (t)	Productivity (kg/ha)	Production (t)	Productivity (kg/ha)
Autumn Rice	13713	896					13713	896
Winter Rice			120063	1297			120063	1297
Summer Rice					97868	2232.7	97868	2232.7
Rape seed & Mustard			5042	556.4			5042	556.4
Wheat			5789	1872.6			5789	1872.6
Pulses (Total)			4634	572.5			4634	572.5
Horti & Plantation							165156	33375

Source: Department of Agriculture, Kamrup Rural

.2.3 Irrigation Based Classification

As discussed earlier in table 2.1, the district is primarily rainfed. Out of the gross cropped area of **176824** ha, the extent of irrigated land is only **53190.7** ha, i.e. 30% of total cropped area.

A total of **123633.5** ha of area is under rainfed cultivation. The area under partial irrigation has been reported to be zero across all the blocks the district.

Table No. 2.3: Irrigation Based Classification

Sr. No.	Name of Block/ Taluka	Irrigated (Area in ha)		Rainfed (Area in ha)	
		Gross Irrigated Area	Net Irrigated Area	Partially Irrigated/Protective Irrigation	Un-Irrigated or Totally Rainfed
1	Bezera	345	290	45	4495
2	Bihdia-Jajikona	3672	2232	2020	11240
3	Boko	3075	2475	0	25873
4	Bongaon	2688	1361	0	4268
5	Chamaria	12238	8742	210	11200
6	Chayani	1179	884	0	8500
7	Chaygaon	1023.5	443	0	5580.5
8	Goroimari	4937	3190	0	4623
9	Hajo	9665	7578	0	13397
10	Kamalpur	1250	770	0	7200
11	Rampur	3025	2119	0	9448
12	Rangia	6405	1958	0	9520
13	Rani	1559.2	1345.1	1298	3888
14	Sualkuchi	2129	1629	0	4401
Total		**53190.7**	**35016.1**	**3573**	**123633.5**

Source: Agriculture Statistics, Kamrup Rural

Chapter 3

District Water Availability

3.1 Status of Water Availability

The district occupies part of the basin formed by mighty river Brahmaputra passing through the central part with a westerly course. The perennial tributaries like Puthimari, Digaru, Kulsi, Singra etc. drain the district and join the River Brahmaputra.

Table 3.1: Water availability in Kamrup Rural

Status of Water Availability					
					In BCM
		Blocks : Goroimari, Bongaon, Chaygaon, Sualkuchi, Rangia			
Sr. No.	**Sources**	**Kharif**	**Rabi**	**Summer**	**Total**
1	**Surface Irrigation**				
(i)	Canal(Major & Medium Irrigation)				
(ii)	Minor Irrigation	0.002	0.002	0.002	**0.006**
(iii)	Lift Irrigation/Diversion	0.030	0.033	0.028	**0.092**
(iv)	Various Water Bodies including Rain Water Harvesting				
(v)	Treated Effluent Received from STP				
(vi)	Untreated Effluent				
(vii)	Perennial sources of water				
2	**Ground Water**				
(i)	Open Well				
(ii)	Deep Tube Well	0.007	0.008	0.006	**0.021**
(iii)	Medium Tube Well				
(iv)	Shallow Tube Wells	0.000	0.000	0.000	0.000

3.2 Status of Ground Water Availability

Groundwater occurs under unconfined to semi-confined condition occupying an area of about 200 sq. km. in and around Haihata – Dumunichowki which is under artesian condition. In other parts also, the water level rests at shallow depth and in major part, it rests between 2 – 5 m bgl during pre-monsoon period. The study of long term water level trend shows no significant change in rise/fall in water level in the last 10 years.

The annual dynamic ground water resources in the whole of Kamrup as on 2009 are estimated to be 1847.29 MCM while the net annual ground water draft is 715.97 MCM. The stage of ground water development is 43%. The projected demand for domestic and industrial uses up to 2025 is estimated to be about 105.16 MCM. The district is still under 'Safe' category and sufficient resources are still available for future development.

Table 3.2: Ground water availability in Kamrup

District wide Ground water Availability Status					
Status of Block as per Central Ground Water Board Notification			Ground Water (MCM)		
Critical	Semi-Critical	Safe	Draft	Recharge	Gap
		Kamrup	715.97	1847.29	-

Source: CGWB

At present, groundwater draft is mainly for domestic and irrigation purposes and a negligible amount is for industry. The water supply schemes for drinking purpose are executed by Assam Public Health Engineering Department through groundwater structures like dug well, hand pump and deep tube well. The groundwater draft for irrigation is mainly from shallow tube well implemented by Agriculture Department through the farmers.

3.3 Status of Command Area

Table 3.3 summarizes the status of command area in the district for each block. As depicted therein, a majority of the command area, i.e., **51630.33** ha or 85.56% out of a total canal command area of **60339.52 ha** has been reported to be undeveloped.

Table 3.3: Status of command area (in hectares)

Block Names	Information of Canal Command			Information on the other Services Command			Total Area	
	Total Area	Developed Area	Undeveloped Area	Total Area	Developed Area	Undeveloped Area	Developed Area	Undeveloped Area
Bihdia Jajikona	75	5605	1265	4340	0	0	0	1265
Hajo	10	2934	210	2724	0	0	0	210
Kamalpur	65	7373.6	1784	5589.6	0	0	0	1784
Goroimari	70	1060	42	1018	7113	3229.05	3884.02	3271.05
Rani (Part)	69	3960	1400	2560	0	0	0	1400
Bongaon	75	30	0	30	338.25	300	38.25	300
Rampur	63	2150	50	2100	7392.82	2199	5193.82	2249
Chaygaon	83	1579.15	160	1419.15	4076.65	922.65	3154	1082.65
Chayani Borduar	63	3231.77	368.19	2863.58	3388.61	872	2516.61	1240.19
Boko	139	6154	410	5744	0	0	0	410
Chamoria	87	3859	180	3679	0	0	0	180
Sualkuchi	43	6030	115	5915	1502	1502	0	1617
Rangia	95	11478	376	11102	1582	1582	0	1958
Bezera	58	4895	2349	2546	0	0	0	2349
Total	**995**	**60339.52**	**8709.19**	**51630.33**	**25393.33**	**10606.7**	**14786.7**	**19315.89**

Source: Irrigation department, Kamrup Rural

3.4 Existing Type of Irrigation

As informed by District Agriculture Department, a total of 54 irrigation canals, 7319 tube wells, 632 bore wells and a total of 8288 irrigation sources are operating in the district. As indicated in table 3.4 (a) and (b), Bongaon block has the maximum number of sources of irrigation, i.e. 6004 out of 8288 irrigation sources in the district. In terms of the command area, Bihdia-Jajikona block has the largest command area with 5895 ha (44.8%) out of a total command area of 13137.9 ha.

Table 4.4(a): Existing type of surface irrigation sources (Numbers)

Name of the Block	Surface Irrigation (1)					Ground Water (2)					
	Canal Based		Tanks / Ponds / Reservoirs			Tube Wells		Open wells		Borewell	
	Govt. Canal	Pvt. Canal	Community Ponds	Pvt. Ponds	Govt. Reservoir /Dams	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.
Bezera											
Bihdia-Jajikona	3	-	-	-	-	302	-	-	-	314	-
Boko	7									5	
Bongaon	1					5752				251	
Chamaria	7									45	
Chayani	5									5	
Chaygaon	3									6	
Goroimari	1									4	
Hajo											
Kamalpur											
Rampur										2	
Rangia	14		283			508					
Rani	5										
Sualkuchi	8					757					
Total	**54**	**0**	**283**	**0**	**0**	**7319**	**0**	**0**	**0**	**632**	**0**

Source: Irrigation department, Kamrup Rural

Table 4(b): Existing type of surface irrigation sources (Numbers)

Name of the Block	Other Sources Including TraditionalWHS (3)	Treated effluent discharged from STP	Water extraction devices / Lift			Total	
			Electricity pump (4)	Diesel pump -5	Others -6	Irrigation sources (1+2+3)	Water extractingunits (4+5+6)

Bezera						0	0
Bihdia-Jajikona	0	-	-	-	-	619	0
Boko			5			12	5
Bongaon						6004	0
Chamaria			45			52	45
Chayani						10	0
Chaygaon						9	0
Goroimari			4			5	4
Hajo						0	0
Kamalpur						0	0
Rampur						2	0
Rangia						805	0
Rani						5	0
Sualkuchi			8			765	8
Total	**0**	**0**	**62**	**0**	**0**	**8288**	**62**

Source: Irrigation department, Kamrup Rural

Table 4.4(c): Existing type of surface irrigation sources (command area in ha)

Name of the Block	Surface Irrigation (1)					Ground Water (2)					
	Canal Based		Tanks / Ponds / Reservoirs			Tube Wells		Open wells		Borewell	
	Govt. Canal	Pvt. Canal	Community Ponds	Pvt. Ponds	Govt. Reservoir /Dams	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.
Bezera											
Bihdia-Jajikona	4870	-	-	-	-	362	-	-	-	663	-
Boko	390									20	

Bongaon	275										
Chamaria	160									20	
Chayani	747.05									150	
Chaygaon	225.85									180	
Goroimari										42	
Hajo											
Kamalpur											
Rampur										50	
Rangia	372		566			1016					
Rani	1400										
Sualkuchi	115					1514					
Total	**8554.9**	**0**	**566**	**0**	**0**	**2892**	**0**	**0**	**0**	**1125**	**0**

Source: Irrigation department, Kamrup Rural

Table 4.4(d): Existing type of surface irrigation sources (Numbers)

Name of the Block	Other Sources Including TraditionalWHS (3)	Treated effluent discharged from STP	Water extraction devices / Lift			Total	
			Electricity pump (4)	Diesel pump -5	Others -6	Irrigation sources (1+2+3)	Water extractingunits (4+5+6)

Bezera						0	0
Bihdia-Jajikona	0	0	0	0	0	5895	0
Boko	0		20			410	20
Bongaon						275	0
Chamaria						180	0
Chayani						897.05	0
Chaygaon						405.85	0
Goroimari			0			42	0
Hajo						0	0
Kamalpur						0	0
Rampur						50	0
Rangia						1954	0
Rani						1400	0
Sualkuchi						1629	0
Total	**0**	**0**	**20**	**0**	**0**	**13137.9**	**20**

Source: Irrigation department, Kamrup Rural

Chapter 4

Water Requirement/Demand

4.1 Domestic Water Demand

The earlier chapters dealt with the general profile, water profile and water availability of Kamrup Rural 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.

As per Census 2001, the district has shown adecadal growth rate of 15.69%. Table 4.1 below indicates the block-wise population of the district. Projected population (2020) has been calculated by assuming a growth rate of14.12% over the period of nine years (from 2011-2020).

It has been assumed that per capita daily water requirement of people residing in urban areas of the district is 150 Litres and for population in rural areas, the daily per capita daily water requirement is 70 Litres. Using the same norms, annual domestic water supply demand has been worked out and given in table 4.1 below.

Table 4.1: Domestic Water Demand

Domestic Water Demand				
Blocks	**Population in 2011**	**Water Demand (MCM)**	**Projected population in 2020**	**Projected Water Demand(MCM)**
Bezera	83860	2.49	95702	2.84
Bihdia-Jajikona	108401	2.77	123708	3.16
Boko	111180	2.84	126880	3.24
Bongaon	54651	1.40	62368	1.59
Chamaria	204884	5.23	233816	5.97
Chayani	97406	3.07	111161	3.50
Chaygaon	79282	2.03	90477	2.31
Goroimari	122082	3.12	139321	3.56
Hajo	193980	5.54	221372	6.32
Kamalpur	91056	2.33	103914	2.66
Rampur	97709	3.29	111506	3.76
Rangia	132000	3.51	150640	4.00
Rani	38986	1.13	44491	1.29
Sualkuchi	68551	2.38	78231	2.72
Total	**14,84,028**	**41.12**	**16,93,588**	**46.92**

4.2 Crop Water Requirement

As discussed in Chapter 2, cereals are cultivated on major part of the gross cropped area in the district. Hence, the crop water requirement for major cereals viz. Paddy, Maize etc as assumed by State Agricultural University has been taken. The assumptions are as under:

- For paddy: 0.6 m per ha,
- For Maize: 0.06 m per ha,
- For wheat: 0.15m per ha,
- Vegetables: 0.18 m per ha and
- For Horticulture crops: 0.06 m/ha

The small portion of area under other crops has been taken in category of vegetables and same assumption has been made.

Table 4.2: Crop Water Demand

Block	Area sown (Ha)	Irrigated area (ha)	Crop Water Demand (MCM)	Water Potential Required (MCM)	Existing Water Potential (MCM)	Water Potential to be created (MCM)
Bezera	4840	345	31.09	31.09	2.22	28.87
Bihdia-Jajikona	14912	3672	95.77	95.77	23.58	72.19
Boko	28948	3075	185.92	185.92	19.75	166.17
Bongaon	6956	2688	44.68	44.68	17.26	27.41
Chamaria	23438	12238	150.53	150.53	78.60	71.93
Chayani	6857.3	489	44.04	44.04	3.14	40.90
Chaygaon	6604	1023	42.41	42.41	6.57	35.84
Goroimari	9560	4937	61.40	61.40	31.71	29.69
Hajo	23062	9665	148.12	148.12	62.07	86.04
Kamalpur	8450	1250	54.27	54.27	8.03	46.24
Rampur	12473	3025	80.11	80.11	19.43	60.68
Rangia	11478	2420	73.72	73.72	15.54	58.18
Rani	5447.2	1559	34.99	34.99	10.01	24.97
Sualkuchi	6530	2129	41.94	41.94	13.67	28.27
Total	**169556**	**48515**	**1088.99**	**1088.99**	**311.59**	**777.40**

Water potential required has been derived from water required by crops cultivated under rainfed conditions. Therefore, the existing water potential represents the water requirement of crops cultivated in irrigated areas.

It can be concluded from the table that a total water potential of 777.40MCM is to be created in the district to fulfill the requirement of crops.

4.2.1 Livestock Water Requirement

The requirement of water by livestock in the district has been derived from livestock census 2007& 20012.Data from the above mentioned sources have been considered to arrive at the growth rate of livestock of the district. As per Census 2007 and 2012, the district has shown the following annual growth rates.

Table 4.3(a): Livestock water requirement

Livestock category	Annual Growth rate
Poultry	-1.27%*
Indigenous Cows	0.58%
Hybrid Cows	-0.71%
Buffalo	-2.58%*
Sheep	9.28%
Goat	8.56%
Pigs	- 3.64%*
Ducks	-2.67%*

Source: Livestock Census 2007 & 2012

*Negative annual growth rates were considered to be 0

Table 4.3 below indicates the block-wise livestock population of the district. Projected livestock population (in 2020) has been calculated by assuming the annual growth rates from table 4.3.1 over a period of eight years (from 2012-2016).

Based on the projected water requirement for livestock in 2020, the gap has been assessed. The total potential which has to be created for livestock in 2020 is 0.038 MCM. This has been assessed on the terms of the following:

- Per capital daily water requirement for cows/buffaloes 65 litres, sheep/goats/pigs 6 litres and Poultry 0.25 liters.

- For projecting the water demand of livestock, growth rate as deduced from census has been considered during calculations. In case of livestock with decreasing growth rate of population, the present population has been considered. It is assumed that present water requirement of livestock is met from existing water usage and hence existing potential is equal to existing demand.

As observed above, the potential to be created for meeting the water demand for livestock is slightly more than existing potential.

Table 4.3(b): Livestock water requirement

Block	Total number of livestock	Present water demand (MCM)	Water demand in 2020 (MCM)	Existing Water potential (MCM)	Water potential to be created (MCM)
Total	**157366**	**5.58**	**5.92**	**5.58**	**0.34**

4.4 Industrial Water Requirement

No medium or large industry exists in the district and hence the industrial water demand is based on water consumption from small service sector units such as hotels, MSMEs, Nursing homes etc. The total yearly water demand from such units in the district comes out to be 71.6 MCM

Table 4.4: Industrial water requirement

Block wise demand of water for industrial activiites for Kamrup Rural District			
Sr. No.	Name of the Block	Demand for water (MCM))	Remarks
1	Bezera	14.9	
2	Bihdia-Jajikona	3.7	
3	Boko	3.7	
4	Bongaon	5.3	
5	Chamaria	4.8	
6	Chayani	4.9	
7	Chaygaon	5.3	
8	Goroimari	6.4	
9	Hajo	2.3	
10	Kamalpur	5.6	
11	Rampur	3.4	
12	Rangia	4.6	

13	Rani	3.9	
14	Sualkuchi	2.8	
Total		**71.6**	

Source: DIC, Kamrup Rural

4.5 Water Demand Power Generation

Power is not generated in the district and hence, water requirement has been indicated to be zero. The power requirement of district is met through common grid system of the state.

Table 4.5: Water demand for power generation

Block	Power requirement, MW	Water demand (BCM)	Water demand in 2020 (BCM)	Existing Water potential (BCM)	Water potential to be created (BCM)
Bezera	Nil	Nil	Nil	Nil	Nil
Bihdia-Jajikona	Nil	Nil	Nil	Nil	Nil
Boko	Nil	Nil	Nil	Nil	Nil
Bongaon	Nil	Nil	Nil	Nil	Nil
Chamaria	Nil	Nil	Nil	Nil	Nil
Chayani	Nil	Nil	Nil	Nil	Nil
Chaygaon	Nil	Nil	Nil	Nil	Nil
Goroimari	Nil	Nil	Nil	Nil	Nil
Hajo	Nil	Nil	Nil	Nil	Nil
Kamalpur	Nil	Nil	Nil	Nil	Nil

Rampur	Nil	Nil	Nil	Nil	Nil
Rangia	Nil	Nil	Nil	Nil	Nil
Rani	Nil	Nil	Nil	Nil	Nil
Sualkuchi	Nil	Nil	Nil	Nil	Nil

4.6 Total Water Demand of the district for various sectors

This section 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(a) and the projected water demand has been depicted in Table 4.6 (b).

Table 4.6(a): Total sector wise present water demand

Total Water Demand of the district for Various sectors							
S. No.	Block	Components					Total, MCM
		Domestic	Crop	Livestock	Industrial	Power Generation	
1	Bezera	2.49	31.09	0.40	14.9	_	48.88
2	Bihdia-Jajikona	2.77	95.77	0.43	3.7	_	102.67
3	Boko	2.84	185.92	0.59	3.7	_	193.05
4	Bongaon	1.40	44.68	0.17	5.3	_	51.55
5	Chamaria	5.23	150.53	0.26	4.8	_	160.82
6	Chayani	3.07	44.04	0.22	4.9	_	52.23
7	Chaygaon	2.03	42.41	0.33	5.3	_	50.07
8	Goroimari	3.12	61.40	0.50	6.4	_	71.42

9	Hajo	5.54	148.12	0.47	2.3	_	156.43
10	Kamalpur	2.33	54.27	0.43	5.6	_	62.63
11	Rampur	3.29	80.11	0.37	3.4	_	87.17
12	Rangia	3.51	73.72	0.46	4.6	_	82.29
13	Rani	1.13	34.99	0.59	3.9	_	40.61
14	Sualkuchi	2.38	41.94	0.36	2.8	_	47.48
Total		**41.12**	**1088.99**	**5.58**	**71.6**	**0**	**1207.29**

Table 4.6(b): Total sector wise projected (2020) water demand

Total Water Demand of the district for Various sectors							
S. No.	Block	Components					Total, MCM
		Domestic	Crop	Livestock	Industrial	Power Generation	
1	Bezera	2.84	31.09	0.42	14.9	_	49.25
2	Bihdia-Jajikona	3.16	95.77	0.45	3.7	_	103.08
3	Boko	3.24	185.92	0.61	3.7	_	193.47
4	Bongaon	1.59	44.68	0.20	5.3	_	51.77
5	Chamaria	5.97	150.53	0.31	4.8	_	161.61
6	Chayani	3.50	44.04	0.24	4.9	_	52.68
7	Chaygaon	2.31	42.41	0.39	5.3	_	50.41

8	Goroimari	3.56	61.40	0.52	6.4	_	71.88
9	Hajo	6.32	148.12	0.49	2.3	_	157.23
10	Kamalpur	2.66	54.27	0.45	5.6	_	62.98
11	Rampur	3.76	80.11	0.39	3.4	_	87.66
12	Rangia	4.00	73.72	0.47	4.6	_	82.79
13	Rani	1.29	34.99	0.60	3.9	_	40.78
14	Sualkuchi	2.72	41.94	0.38	2.8	_	47.84
Total		**46.92**	**1088.99**	**5.92**	**71.6**	**0**	**1213.43**

4.7 Water budget

Water budget reflects the relationship between input and output of water through a region. Thus we have a direct comparison of supply of water and the natural demand for water. The following data provides current water gap and projected water gap for the year2020.

Table 4.7: Water Budget

Water Budget					
Name of Blocks	Existing water availability (MCM)	Water Demand (MCM)		Water Gap (MCM)	
		Present	Projected (2020)	Present	Projected (2020)
Bezera	20.01	48.88	49.25	28.87	29.24
Bihdia-Jajikona	30.48	102.67	103.08	72.19	72.60
Boko	26.88	193.05	193.47	166.17	166.59
Bongaon	24.14	51.55	51.77	27.41	27.63
Chamaria	88.89	160.82	161.61	71.93	72.72
Chayani	11.33	52.23	52.68	40.90	41.35
Chaygaon	14.23	50.07	50.41	35.84	36.18
Goroimari	41.73	71.42	71.88	29.69	30.15

Hajo	70.39	156.43	157.23	86.04	86.84
Kamalpur	16.39	62.63	62.98	46.24	46.59
Rampur	26.49	87.17	87.66	60.68	61.17
Rangia	24.11	82.29	82.79	58.18	58.68
Rani	15.64	40.61	40.78	24.97	25.14
Sualkuchi	19.21	47.48	47.84	28.27	28.63
Total	**429.89**	**1207.29**	**1213.43**	**777.40**	**783.53**

Figure 4.6(a): Present Water Demand &Gap (in MCM)

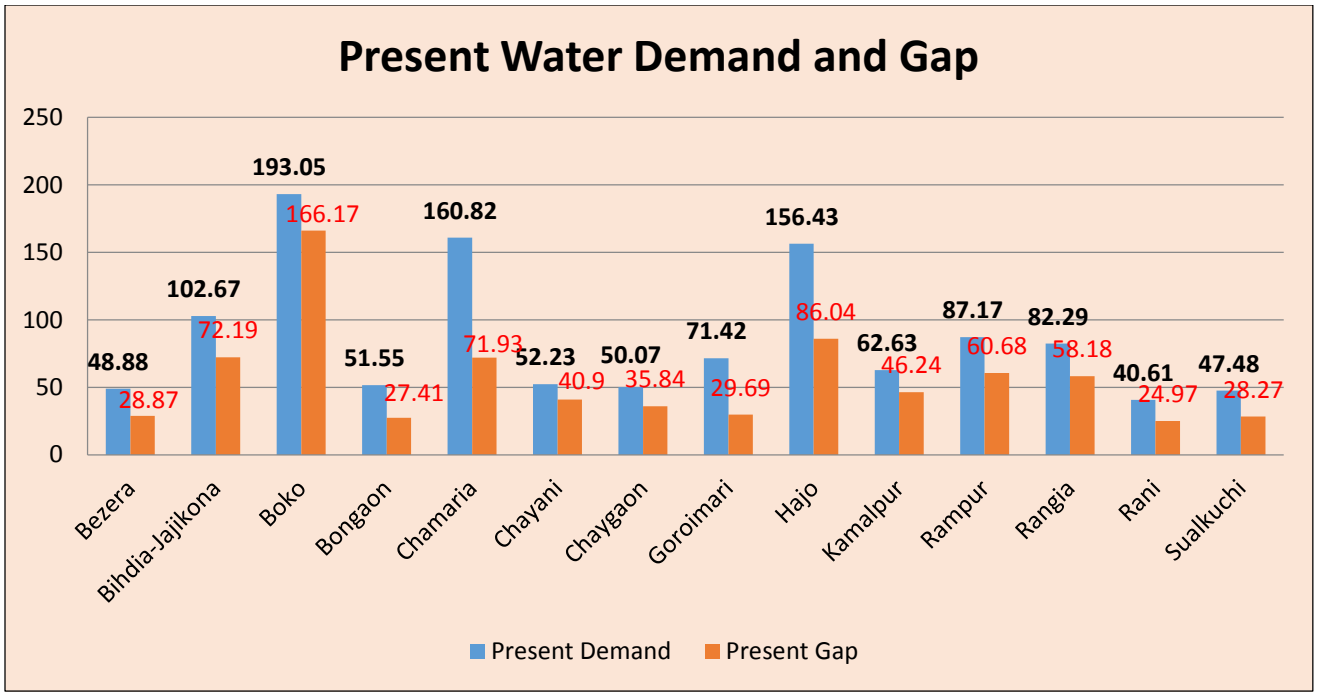
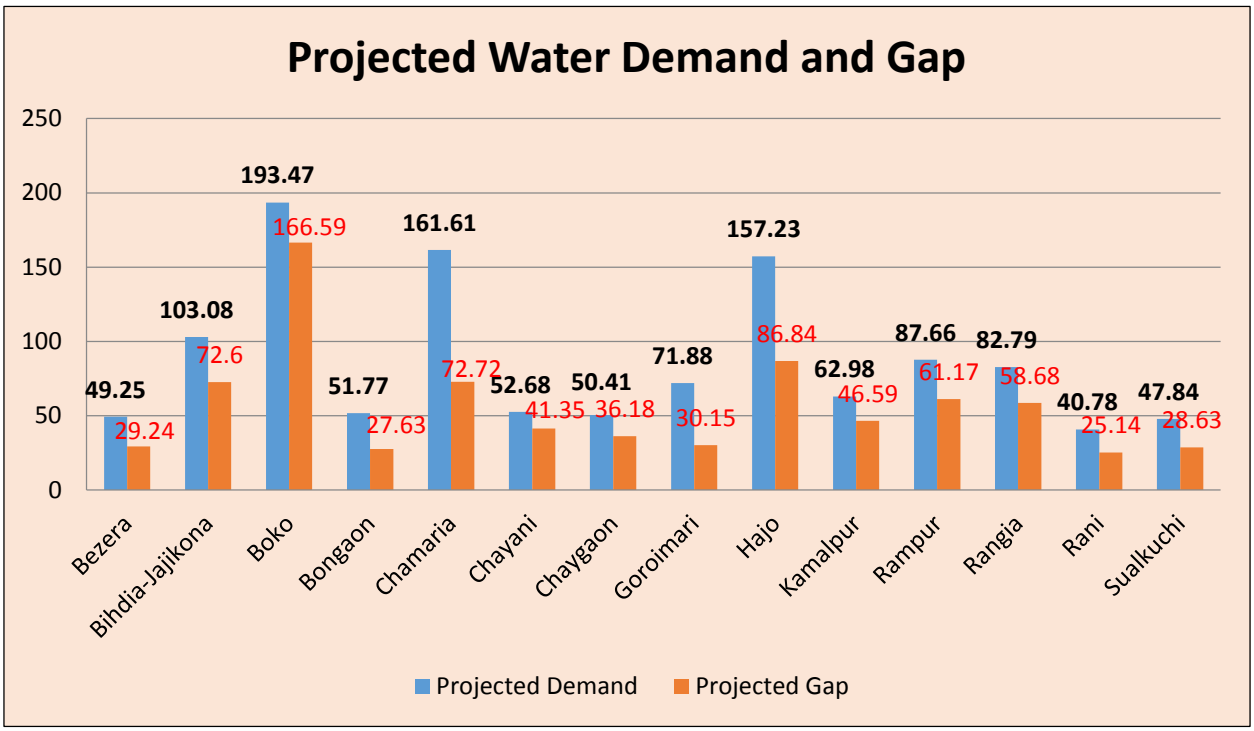


Figure 4.6(b): Projected Water Demand & Gap (in MCM)



Chapter 5

Strategic Action Plan for Irrigation

The vision of the scheme PMKSY is to ensure access to some means of protective irrigation to all agricultural farms in the country, to increase water use efficiency by its 'per drop more crop' subcomponent, thus bringing much desired rural prosperity. The need of the hour is to have well managed watershed resources which not only enhances the ecological resource base of a rural economy but will also create sustainable livelihood opportunity.

5.1.1 Strategic Plan for irrigation in PMKSY

At present, the schemes implemented by all the departments are broadly based and are required to be specific and location/ problem based. A systematic integrated approach having full participation of the users in the planning process is the need of the hour and extension facilitation should be inter-disciplinary. On the basis of methodology described above, a strategic plan for four years has been prepared starting from 2016-17 to 2019-20.

The schemes have been prepared by the proper consultation with the actual beneficiaries. The plan in brief is detailed below.

5.2 Department wise total Plan of the district

Estimated plan for whole district under the scheme for five years works out to be Rs.1061.1 crores. Irrigation Department accounts for the maximum share of about Rs. 799.6 crores (75.35%) and is followed by Agriculture Department with a budget of Rs. 174.4 crores (16.44%) while Soil Conservation has a share of 8.21% which amounts to Rs 87.1 crores. While working out the plan, phasing of ongoing irrigation projects has been considered. However, from the proposal of departments, eligible activities under RIDF will be covered as per the funds requirement of the State. Capacity building, extension and training are important components for successful execution of the plan. Department wise plan for 2016-17, 2017-18, 2018-19 and 2019-20 has been proposed

Table 5.2(a): Department-wise plan (Amount)

Department	No/Estimated Amount of Scheme (in INR Crores)						
	Bezera	Bihdia-Jajikona	Boko	Bongaon	Rani (part)	Chamaria	Chayani
Agriculture	2.2	6.9	56.31	6.1	5.9	19.1	5.4
Irrigation	48.2	203.7	33.7	29.6	40.8	58.8	61.9
Soil Conservation	2.1	2.5	12.5	4.9	12.2	25.4	13.0
Total	**52.5**	**213.1**	**102.5**	**40.6**	**58.9**	**103.3**	**80.3**

Source: Department of Agriculture, Irrigation & Soil Conservation

Table 2(b): Department-wise plan (Amount)

Department	No/Estimated Amount of Scheme (in INR Crores)							
	Chaygaon	Goroimari	Hajo	Kamalpur	Rampur	Rangia	Sualkuchi	Amount (INR Crores)
Agriculture	5.9	5.8	13.5	4.9	11.7	4.5	26.2	**174.4**
Irrigation	26.2	18.2	92.6	89.4	46.2	4.0	46.3	**799.6**
Soil Conservation	4.9	3.3	0	0	1.8	2.1	2.4	**87.1**
Total	**37**	**27.3**	**106.1**	**94.3**	**59.7**	**10.6**	**74.9**	**1061.1**

Source: Department of Agriculture, Irrigation & Soil Conservation

Table 5.2(c): Department-wise plan (Command Area)

Department	Command Area of Scheme (in Hectares)						
	Bezera	Bihdia-Jajikona	Boko	Bongaon	Rani (part)	Chamaria	Chayani
Agriculture	488.0	599.0	15934.5	2357.4	904.0	8391.0	2014.4
Irrigation	1936.0	16393.0	4663.0	1420.5	2540.0	3524.0	2893.6
Soil Conservation	1589.0	2049.5	2007.1	782.3	2197.1	4833.8	2195.6
Total	4013.0	19041.5	23504.6	4560.2	5641.1	16748.8	7103.6

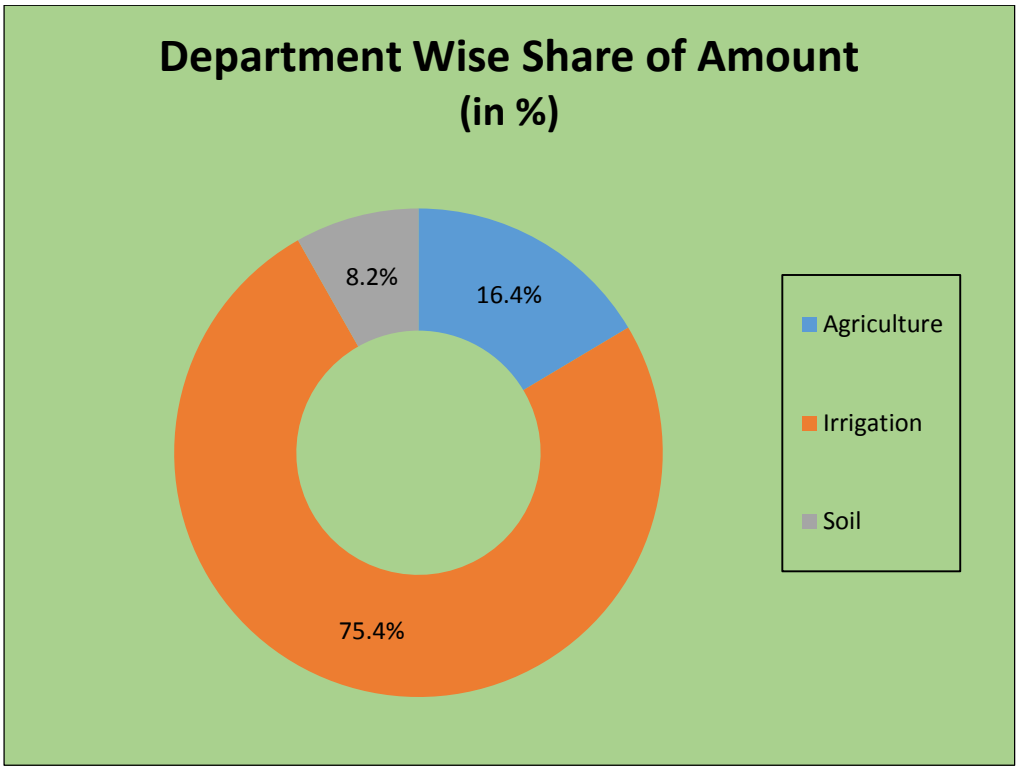
Source: Department of Agriculture, Irrigation & Soil Conservation

Table 5.2(d): Department-wise plan (Command Area)

Department	Command Area of Scheme (in Hectares)							
	Chaygaon	Goroimari	Hajo	Kamalpur	Rampur	Rangia	Sualkuchi	Total (Hectares)
Agriculture	2636.0	3858.5	3832.0	4464.2	4694.5	1868.0	1230.0	53271.5
Irrigation	1274.2	799.0	5660.0	632.0	2100.0	1618.0	2796.0	48249.3
Soil Conservation	879.6	642.8	0.0	0.0	318.7	1741.4	1957.3	21194.2
Total	4789.8	5300.3	9492.0	5096.2	7113.2	5227.4	5983.3	122715

Source: Department of Agriculture, Irrigation & Soil Conservation

Figure 5.2: Department-wise share under PMKSY



5.3 Component-wise Plan

The plan is prepared component wise also. Table 5.3 shows component wise plan for 4 years starting from 2016-17 to 2019-20. AIBP component has to be executed mainly by Irrigation Department. Her Khet ko Pani and Per Drop More Crop components will be executed by Horticulture department mainly. Watershed component will be taken care of by the Agriculture Department and Rural Development Department. Extension & training component will be executed by ATMA. Since Agriculture Department has also proposed plan under PMKSY watershed, it has to coordinate with the Rural Development Department. However, all the stakeholders need to have coordination among themselves to have the maximum irrigation efficiency and to avoid duplicity. Figure 5.2 is the graphical representation of various components of PMKSY. It is observed that maximum share of 69.8% is for Har Khet ko Pani followed by AIBP which amounts for 20.7% of all the funds. Watershed and Per Drop More Crop component account for 8.2% and 1.3% of the total share of proposed strategic plan for the district.

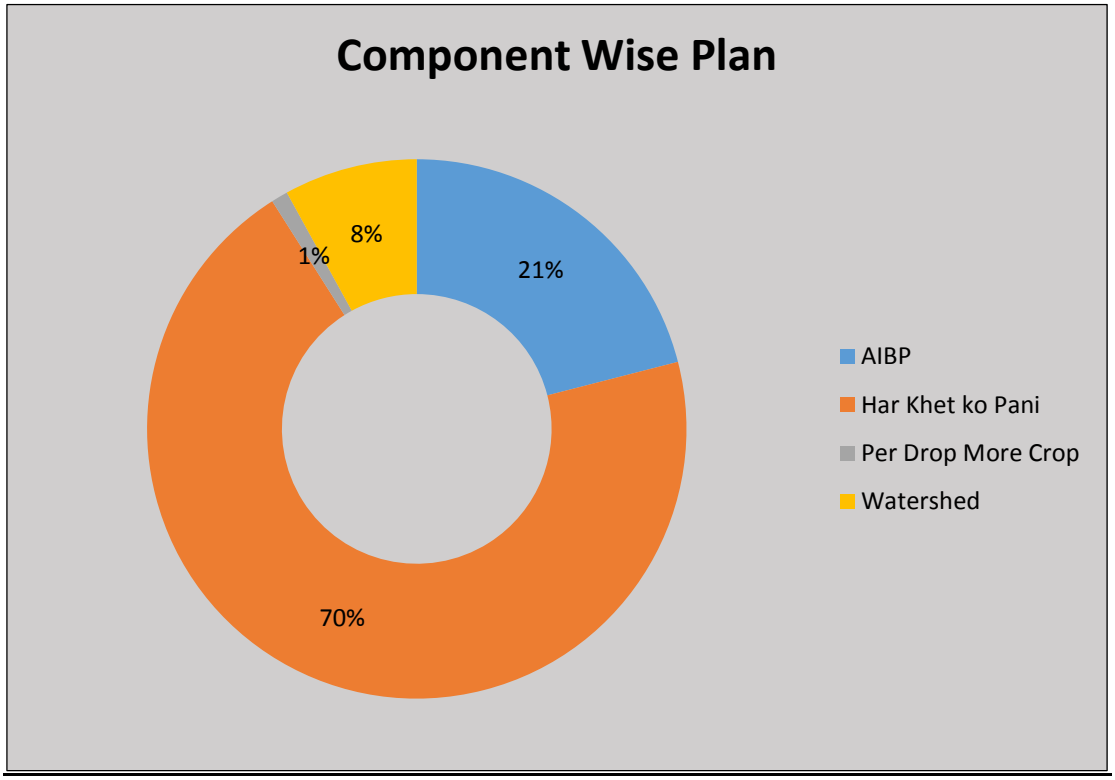
Table 5.3: Component-wise plan (Amount in INR Crores)

Block	AIBP	Har Khet ko Pani	Per Drop More Crop	Watershed
Bezera	0	49.2	1.2	2.1
Bihdia-Jajikona	122.2	88.3	0	2.5
Boko	2.1	87.94	0	12.5
Bongaon	6.6	24.0	5.1	4.9
Chamaria	7.0	70.9	0	25.4
Chayani	24.9	42.2	0.1	13
Chaygaon	2.4	27.9	1.7	4.9
Goroimari	0	23.7	0.3	3.3
Hajo	1.7	99.6	4.9	0

Kamalpur	0	94.3	0.0	0
Rampur	0	57.6	0.4	1.8
Rangia	0	8.6	0	2.1
Rani	33.0	13.7	0	12.2
Sualkuchi	20.0	52.2	0.3	2.4
Total	**219.9**	**740.1**	**14**	**87.1**

Source: Department of Agriculture, Kamrup Rural

Figure 5.3: Component-wise plan



5.4 Block-wise Plan under PMKSY

Out of the total plan of 1061.1 crores, 20.1% is pertaining to Bihidia Jajikona block while Hajo has a share of 10.6%. The share of Chomaria Block is to the tune of 10.0% in the total plan. Table below describes block and department wise share in plan.

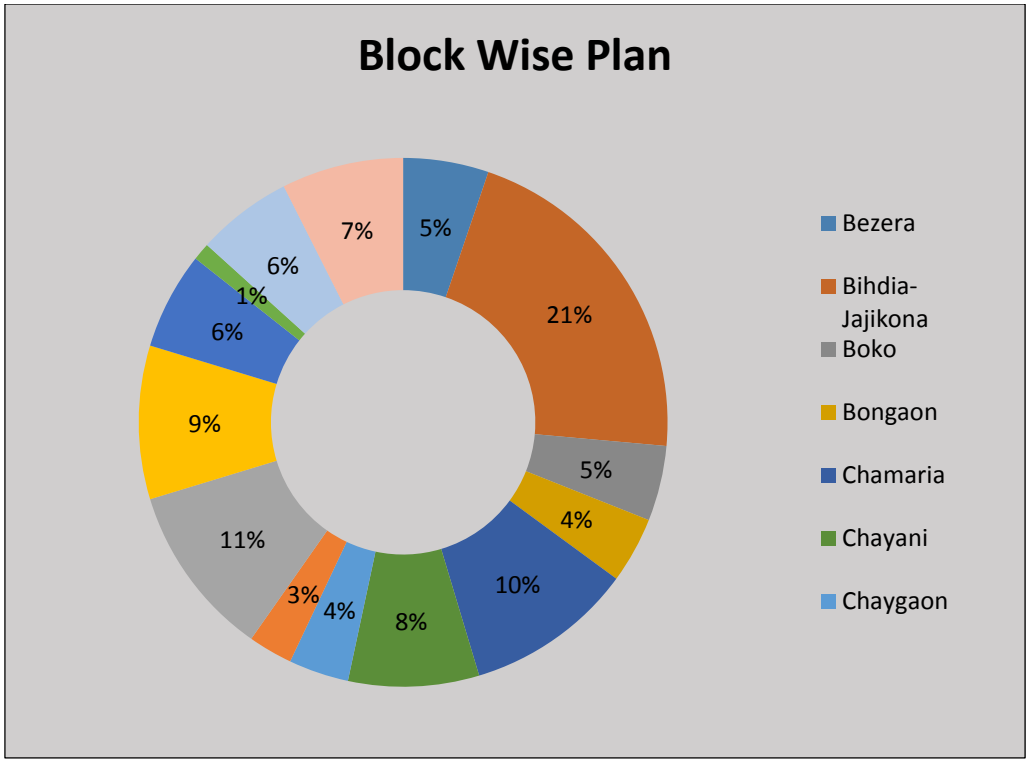
Table 5.4: Block wise plan under PMKSY

Department wise Block level estimation (Amount in INR Crores)				
Block	**Irrigation**	**Agri/Horti**	**Soil Conservation**	**Total**
Bezera	48.2	2.2	2.1	52.5
Bihdia-Jajikona	203.7	6.9	2.5	213.1
Boko	33.7	56.3	12.5	102.5
Bongaon	29.6	6.1	4.9	40.7
Chamaria	58.8	19.1	25.4	103.3
Chayani	61.9	5.4	13.0	80.3
Chaygaon	26.2	5.9	4.9	36.9
Goroimari	18.1	5.8	3.3	27.3
Hajo	92.6	13.5	0.0	106.2
Kamalpur	89.4	4.9	0.0	94.3
Rampur	46.2	11.7	1.8	59.7
Rangia	4.0	4.5	2.1	10.7
Rani	40.8	5.9	12.2	58.8

Sualkuchi	46.3	26.2	2.4	74.9
Total	**799.6**	**174.4**	**87.1**	**1061.1**

Source: Department of Agriculture, Kamrup Rural

Figure 5.4: Block-wise share in plan



5.5 Suggestions

For successful implementation of PMKSY plan it is suggested that:

- All the stakeholders should convene meeting of Panchayat Samities and then finalize the village plan and prepare DPR.
- There should not be any duplicity of project.

- The Department should supplement each other so that the maximum irrigation efficiency is achieved.
- Agriculture and Horticulture Department should take micro irrigation projects in the command of minor irrigation projects which are either completed or likely to be completed in near future.
- 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 to minimize the gap in potential created and potential utilized.
- Wherever sites with low head LIS have already been exhausted, higher per hectare norms should be allowed.
- Execution of the scheme should be expeditiously completed.
- There should be smooth fund flow for timely completion of the project and to avoid cost escalation.

5.6 Expected Outcome

As stated above in earlier chapters gross sown area of the district is **176824** hectare of which **53190.7** hectare is irrigated. Thus there is a gap of **123633.5** hectare which can be converted from rainfed to area under assured irrigation. As the water requirement of crops for the existing cropping pattern works out to be **1089** MCM and if the gross cropped area is to be brought under irrigated area, **777.4** MCM water is required. Though the water (surface and ground water) is available in the district yet it will not be feasible to create irrigation potential to the extent of 100% as the construction of irrigation project may not be economically viable even if it is technically feasible. In hilly area due to tough terrain, high head, small and fragmented land holdings, per hectare cost may be very high.

Keeping in view the above constraints a plan to develop irrigation potential of **122715** ha has been proposed. It is proposed to create irrigation potential by installing new lift irrigation and flow irrigation schemes tapping surface water and installation of tube wells and bore wells where ground water is available. Besides, water Harvesting structures have also been proposed which will harvest rainwater as also spring water.

Potential of **48249.2** hectare is proposed to be created by Irrigation department. Department of Agriculture has proposed to create and irrigation potential of **53271.5** hectare. STW, Solar pump sets, Sprinkler and drip irrigation schemes have been proposed by the department. On completion of these projects, it is expected that an additional irrigation potential will be created due to saving of water through adoption of water saving methods of irrigation.

Soil Conservation Department has proposed to create an irrigation potential of **21194.2** hectare which is around 17.27% of the total potential proposed to be created.

The scheme also includes convergence with MGNREGS for creation of water sources to full potential in identified backward rainfed blocks including renovation of traditional water bodies, creation of new water conservation and water harvesting structures, irrigation canals and drains, land development, etc but the plan of convergence schemes has not been prepared as there were no such convergence scheme going on in the district as of date.

ANNEXURES

ANNEXURE – 1: Block Wise Strategic Action Plan under PMKSY

1) **Name of Block: Bezera**

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY								
S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1		MoWR	AIBP	Major Irrigation				
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation				
4		MoWR	HAR Khet Ko Pani	Lift Irrigation				
5		MoWR		Ground Water develpoment (DTW)	67	1936	5	4820.64
		MOA & FW-DAC & FW		Ground Water develpoment (STW)	173	349	2	86.5
		MOA & FW-DAC & FW		LLP	41	82	2	16.4
6		MoWR		RRR of Water Bodies				
7		MoWR		Construction of field channels				
7.1		MoWR		Lined Field Channels				
7.2		MoWR		Unlined Field Channels				
8		MoWR		Micro-Irrigation				
9		MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
10		MOA & FW-DAC & FW		DPAP Sprinkler				
11		MOA & FW-DAC & FW		Non- DPAP Drip	2	4	1	7.41
12		MOA & FW-DAC & FW		Non- DPAP Sprinkler	12	13	1	9.61
13		MOA & FW-DAC & FW	Per drop more crop (Supplementary water management activities)	Topping up of MGNREGA				

		MOA & FW-DAC & FW		Pond	20	40	3	100
14		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures				
15		MOA & FW-DAC & FW		Secondary Storage Structure				
16		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				

Chapter 5. Strategic Action Plan for Irrigation in District Kamrup (R)Under PMKSY									Remarks
Sl. No.		**Concerned Ministry / Department**	**Component**	**Activity**	**Total Number/ Capacity (Cum)**	**Command Area/ Irrigation Potential (Ha)**	**Period of Implemantation (5/7 Years)**	**Estimated cost (in lakh)**	
	Bezera Development Block		**PMKSY Watershed**	**Newly created WHS**					The activities that are listed in the prescribed format being included as per the approved DPRs of IWMP from DoLR, MoRD, GOI and as per PMKSY Guide Lines.
1		DoLR - MoRD		LDP (Agri Field Bund)	19/43984 m³	437.30	1st,2nd,3rd, 4th & 5th year	52.341	
3		DoLR - MoRD		Farm Ponds	4/4570 m³	132.30	1st,2nd,3rd, 4th & 5th year	15.888	
6		DoLR - MoRD		Drainage Channel Cutting	27/57988 m³	683.00	1st,2nd,3rd, 4th & 5th year	95.681	
		DoLR - MoRD		Horticulture	1/1.00 Hact.	1.00	1st,2nd,3rd, 4th & 5th year	1.450	
9		DoLR - MoRD		Plantation	5/435 Nos.	53.6	1st,2nd,3rd, 4th & 5th year	7.83	
				Renovated WHS					

10		DoLR - MoRD		Farm Pond/ Fishery	10/10858 m³	281.80	1st,2nd,3rd, 4th & 5th year	37.570	

2) Name of Block: Bihdia-Jajikona

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY								
S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1		MoWR	AIBP	Major Irrigation	1	4340	5	6834
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation	17	2695	5	5390
4		MoWR	HAR Khet Ko Pani	Lift Irrigation				
5		MoWR		Ground Water develpoment -DTW	21	2072	5	4500
		MOA & FW-DAC & FW		Ground Water develpoment- STW	210	425	5	600
		MOA & FW-DAC & FW		LLP	174	174	5	87
6		MoWR		RRR of Water Bodies				
7		MoWR		Construction of field channels				
7.1		MoWR		Lined Field Channels	14	7286	5	3643

7.2		MoWR		Unlined Field Channels				
8		MoWR		Micro-Irrigation				
9		MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
10		MOA & FW-DAC & FW		DPAP Sprinkler				
11		MOA & FW-DAC & FW		Non- DPAP Drip				
12		MOA & FW-DAC & FW		Non- DPAP Sprinkler				
13		MOA & FW-DAC & FW	Per drop more crop (Supplementary water management activities)	Topping up of MGNREGA				
14		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures				

15		MOA & FW-DAC & FW		Secondary Storage Structures				
16		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				

Chapter 5. Strategic Action Plan for Irrigation in District Kamrup (R)Under PMKSY									Remarks
Sl. No.	**Name of the Blocks/ Sub Division**	**Concerned Ministry / Department**	**Component**	**Activity**	**Total Number/ Capacity (Cum)**	**Command Area/Irrigation Potential (Ha)**	**Period of Implemantation (5/7 Years)**	**Estimated cost (in lakhs)**	
	Bihdia Jajikona Development Block		**PMKSY Watershed**	**Newly created WHS**					The activities that are listed in the prescribed format being included as per the approved DPRs of IWMP from DoLR, MoRD, GOI and as per PMKSY Guide Lines.
1		DoLR - MoRD		LDP (Agri Field Bundh)	77/134762 m³	1315.00	1st,2nd,3rd,4th and 5th yr	160.370	
2		DoLR - MoRD		Drainage Channel	6 / 8145 m³	91.00	1st,2nd,3rd,4th and 5th yr	13.440	
3		DoLR - MoRD		RCC Check Dam	9/282153m³	397.00	1st,2nd,3rd,4th and 5th yr	47.684	
4		DoLR - MoRD		Farm Pond/ Fishery	16/15565 m³	208.85	1st,2nd,3rd,4th and 5th yr	25.062	
5		DoLR - MoRD		RTP (Boulder Pitching)	2/279 m³	37.60	1st,2nd,3rd,4th and 5th yr	4.510	

				Renovated WHS					
6		DoLR - MoRD		Farm Pond/ Fishery					

3) **Name of Block: Boko**

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY								
S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1		MoWR	AIBP	Major Irrigation				
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation	2	2050	3	211.23
3		MoWR	HAR Khet Ko Pani	Surface Minor Irrigation	5	2493	5	3123
4		MoWR		Lift Irrigation				
5		MoWR		Ground Water develpoment (DTW)	4	120	5	40
		MOA & FW-DAC & FW		Ground Water develpoment (STW)	2626	5223		
		MOA & FW-DAC & FW		Ground Water develpoment (EM)	2256	4585.33		1128
		MOA & FW-DAC & FW		LLP	995	1418		348.25
		MOA & FW-DAC & FW		RWHT, LLP & Earthen Canal	54	5608.23		4155.2
6		MoWR		RRR of Water Bodies				
7		MoWR		Construction of field channels				
7.1		MoWR		Lined Field Channels				
7.2		MoWR		Unlined Field Channels				
8		MoWR		Micro-Irrigation				
9		MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
10		MOA & FW-DAC & FW		DPAP Sprinkler				
11		MOA & FW-DAC & FW		Non- DPAP Drip				
12		MOA & FW-DAC		Non- DPAP Sprinkler				

		& FW						
13		MOA & FW-DAC & FW	Per drop more crop (Supplementary water management activities)	Topping up of MGNREGA				
14		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures				
15		MOA & FW-DAC & FW		Secondary Storage Structure				
16		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				
21		State Planned Scheme of Irrigation						
21.1		State Irrigation Department	Name of the scheme	Major Irrigation				
21.2		State Irrigation Department	Name of the scheme	Medium Irrigation				
21.3		State Irrigation Department	Name of the scheme	Surface Minor Irrigation				
22		Irrigation Scheme of State Agriculture Department	Name of the scheme					
23		Irrigation Scheme of State Agriculture Department	Name of the scheme					
24		Externally aided projects	Name of the scheme					

25		other loan projects like NABARD	DTW Repair	Ground Water develpoment	1	30	1	55.4

4) Name of Block: Bongaon

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY								
S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1		MoWR	AIBP	Major Irrigation				
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation	1	275	1st,2nd & 3rd Year	660.06
4		MoWR	HAR Khet Ko Pani	Lift Irrigation				
5		MoWR		Flow Irrigation	3	665.45	1st,2nd & 3rd Year	1456.16
5		MoWR		Ground Water develpoment (DTW)	16	480	2nd,3rd & 4th Year	846
5		MOA & FW-DAC & FW		Ground Water develpoment (STW)	180	360	1st,2nd & 3rd Year	81
5		MOA & FW-DAC & FW		LLP	50	75	1st & 2nd Year	17.5
6		MoWR		RRR of Water Bodies				
7		MoWR		Construction of field channels				
7.1		MoWR		Lined Field Channels				
7.2		MoWR		Unlined Field Channels				
8		MoWR		Micro-Irrigation				
9		MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
10		MOA & FW-DAC & FW		DPAP Sprinkler				
11		MOA & FW-DAC & FW		Non- DPAP Drip				
12		MOA & FW-DAC & FW		Non- DPAP Sprinkler				
13		MOA & FW-DAC & FW	Per drop more crop (Supplementary water	Topping up of MGNREGA				

			management activities)					
14		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures	32	1922.42	1st,2nd,3rd, 4th and 5th Year	510
15		MOA & FW-DAC & FW		Secondary Storage Structure				
16		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				

Proposed List of Activity for PMKSY(Watershed Development)Under Soil Conservation Department,Kamrup District

Sl. No.	*Name of the Blocks/Sub Districts*	*Concerned Ministry/ Department*	*Component*	*Activity to be done (already included in DPR)*	*Total Number/ Capacity (cum)*	*Command Area/Irrigation Potential (Ha)*	*Period of Implementation (5/7yrs)*	*Estimated cost (Rs. in Lakh.)*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
1	***Bongoan***	***DoLR***	**PMKSY (watershed Development) IWMP**	Earthen Channel at Bakrapara	878	1.6	**2016-17**	0.79
2				Earthen Channel at Batakuchi	878	1.6	-Do-	0.79
3				Earthen Channel at Batakuchi NC	1053	1.9	*-Do-*	0.95
4				Earthen Channel at Bhutarguri	878	1.6	-Do-	0.79
5				Earthen Channel at Guleboka	878	1.6	-Do-	0.79

6				Graded Bund at Goleboka	2576	4.4	-Do-	2.19
7				Graded Bund at Kahibama N.C.	3092	5.3	-Do-	2.63
8				Graded Bund at Baghmara	3092	5.3	-Do-	2.63
9				Graded Bund at chakrapani	1804	3.1	-Do-	1.53
10				Graded Bund at chakrasila	2061	3.5	-Do-	1.75
11				Graded Bund at Rajapara	2576	4.4	-Do-	2.19
12				Drainage Channel at Bakrapara	1756	3.2	-Do-	1.58
13				Drainage Channel at Batakuchi NC	1931	3.5	-Do-	1.74
14	***Bongoan***	***DoLR***	**PMKSY (watershed Development) IWMP**	Drainage Channel at Bhutarguri	1756	3.2	-Do-	1.58
15				Drainage Channel at Borkhal No.1	1756	3.2	-Do-	1.58
16				Drainage Channel at Borkhal No.2	1756	3.2	-Do-	1.58
17				Drainage channel at Bakrapara village	7911	14.2	-Do-	7.12
18				RCC Check Dam at Batakuchi village	6275	6.7	-Do-	6.00
19				Drainage channel at Rajapara village	10133	18.2	-Do-	9.12
20				RCC Check Dam at Bhutaguri village 4Nos.	45454	44.4	-Do-	40.00
21				Drainage Channel at Goleboka	1756	3.2	-Do-	1.58
22				Drainage Channel at Kahibama	2633	4.7	-Do-	2.37
23				Drainage Channel at Kochpara	1756	3.2	-Do-	1.58
24				Drainage Channel at Paragaon	1756	3.2	-Do-	1.58
25				Farm Pond at Bakrapara	844	2.4	**2017-18**	1.18
26				Farm Pond at Batakuchi NC	844	2.4	-Do-	1.2
27				Farm Pond at Bhutarguri	844	2.4	-Do-	1.18
28				Farm Pond at Kahibama	844	2.4	-Do-	1.18
29				Farm Pond at Kahibama N. C.	844	2.4	-Do-	1.18
30				RCC Check Dam at Batakuchi	8500	8.6	-Do-	7.74

31	***Bongoan***	***DoLR***	**PMKSY (watershed Development) IWMP**	Earthen Embankment at Bhutaguri village	-	14.0	-Do-	7.00
32				Earthen Embankment at Barkhal village	-	17.0	-Do-	8.50
33				RCC Check Dam at 2No. Sakumari 4Nos.	11364	11.1	-Do-	10.00
34				RCC Check Dam at Santipur village 2Nos.	28410	27.8	*-Do-*	25.00
35				Drainage Channel at Ouphula village	7778	14.0	-Do-	7.00
36				RCC Check Dam at Panugaon	17045	16.7	-Do-	15.00
37				Drainage Channel at Panugaon	4444	8.0	-Do-	4.00
38				RCC Check Dam at Chakrapani	17045	16.7	**2018-19**	15.00
39				Drainage channel at Baghmara village	8889	16.0	-Do-	8.00
40				Drainage channel at Chakrasila village	7911	14.2	-Do-	7.12
41				RCC Check Dam at Borkhal No.1	7200	6.4	-Do-	5.80
42				RCC Check Dam at Kochpara	7200	6.4	-Do-	5.80
43				RCC Check Dam at Baghmara	8500	8.6	-Do-	7.74
44				RCC Check Dam at Chakrapani	8500	8.6	-Do-	7.74
45				RCC Check Dam at Chakrasila	7200	6.4	-Do-	5.80
46				RCC Check Dam at Paragaon	8500	8.6	-Do-	7.74
47	**Bongoan**	**DoLR**	**PMKSY (watershed Development) IWMP**	RCC Check Dam at Rajapara	7200	6.4	-Do-	5.80
48				Reclamation of Marshy Land/ Community Pond at Borkhal No.2	1021	2.9	-Do-	1.43
49				RCC Check Dam at Chakrasila village	6925	7.8	-Do-	7.00
50				Drainage channel at Bakrapara village	7911	14.2	-Do-	7.12

51				RCC Check Dam at Batakuchi village	6275	6.7	-Do-	6.00
52				Drainage channel at Rajapara village	10133	18.2	**2019-20**	9.12
53				Earthen Bund at Parugaon village	7500	12.0	-Do-	6.00
54				RCC Check Dam Panugaon village	18750	16.7	-Do-	15.00
55				Drainage Channel (Brick) Nadiapara village	24444	44.0	-Do-	22.00
56				Drainage Channel (Brick) Jambari village	22222	40.0	-Do-	20.00
57				Earthen Bund at Jambari village	25000	40.0	-Do-	20.00
58				Water Harvesting Pond at Jambari village	17857	50.0	-Do-	25.00
59				RCC Check Dam at Choudhuripara village	25000	22.2	**2020-21**	20.00
60				RCC Check Dam at Santipur village	25000	22.2	-Do-	20.00
61				Water Harvesting Pond at Nizbogai- 3 Nos.	21429	60.0	-Do-	30.00
62				Drainage Channel at Milaghat village	27777	50.0	-Do-	25.00
Total						**782.3**		**494.81**

5) Name of Block: Chamaria

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY								
S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1		MoWR	AIBP	Major Irrigation				
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation	1	1200	3	700
3		MoWR	HAR Khet Ko Pani	Surface Minor Irrigation	5	980	0	1350
4		MoWR		Lift Irrigation				
5		MoWR		Ground Water develpoment (DTW)	45	1344	5	3830
5		MOA & FW-DAC & FW		Ground Water develpoment (STW)	4140	8391	5	1910.24
6		MoWR		RRR of Water Bodies				
7		MoWR		Construction of field channels				
7.1		MoWR		Lined Field Channels				
7.2		MoWR		Unlined Field Channels				
8		MoWR		Micro-Irrigation				
9		MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
10		MOA & FW-DAC & FW		DPAP Sprinkler				
11		MOA & FW-DAC & FW		Non- DPAP Drip				
12		MOA & FW-DAC & FW		Non- DPAP Sprinkler				
13		MOA & FW-DAC & FW	Per drop more crop (Supplementary water management activities)	Topping up of MGNREGA				

14		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures				
15		MOA & FW-DAC & FW		Secondary Storage Structure				
16		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				
21		State Planned Scheme of Irrigation						
21.1		State Irrigation Department	Name of the scheme	Major Irrigation				
21.2		State Irrigation Department	Name of the scheme	Medium Irrigation				
21.3		State Irrigation Department	Makeli FIS	Surface Minor Irrigation	1	335	5	600
22		Irrigation Scheme of State Agriculture Department	Name of the scheme					
23		Irrigation Scheme of State Agriculture Department	Name of the scheme					
24		Externally aided projects	Name of the scheme					
25		other loan projects like NABARD	DTW Repair	Ground Water develpoment	1	30	1	55.4

Proposed List of Activity for PMKSY(Watershed Development) Under Soil Conservation Department, Kamrup District								
Sl. No.	***Name of the Blocks/Sub Districts***	***Concerned Ministry/ Department***	***Component***	***Activity to be done (already included in DPR)***	***Total Number/ Capacity (cum)***	***Command Area/Irrigation Potential (Ha)***	***Period of Implementation (5/7yrs)***	***Estimated cost (Rs. in Lakh.)***
1	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***
1	**Chomaria**	**DoLR**	**PMKSY (watershed Development) IWMP**	Earthen Embankment at Topamari Village	-	10.5	**2016-17**	5.27
2				Earthen Embankment at Rangeswari Village	-	5.9	-Do-	2.97
3				Farm Pond at Pijupara Village.	6600	12.1	-Do-	6.07
4				Farm Pond at Choudhurypam Village	792	2.2	-Do-	1.11
5				Farm Pond at Nimutari Village	952	1.7	-Do-	0.86
6				Bamboo Spur at Bhakuradia Village	-	18.0	-Do-	9.02
7				Farm Pond at Tanganmari Village	846	2.4	-Do-	1.18
8				Farm Pond at Natunkatmi Village	1602	4.5	-Do-	2.24
9				Earthen Embankment at Nizkatmi Village	-	3.6	-Do-	1.79
10				Farm Pond at Morakolohi Village	1764	4.9	-Do-	2.47
11				Farm Pond at Newldova Village	1568	2.8	-Do-	1.41

12				Earthen Embankment at Kalibari Pathar Village	-	2.1	-Do-	1.05
13				Farm Pond at Duramari Village	2754	7.7	-Do-	3.86
14	Chomaria	DoLR	PMKSY (watershed Development) IWMP	Earthen Embankment at Badla Pathar Village	-	4.8	-Do-	2.39
15				Farm Pond at Dakhin Rongapani Village	4704	8.5	-Do-	4.23
16				Farm Pond at Batiamari Village	5320	9.6	-Do-	4.79
17				Farm Pond at Bogoriguri Village	2744	4.9	-Do-	2.47
18				Farm Pond at Malibari Pathar No-1	3006	8.4	-Do-	4.21
19				Farm Pond at Malibari Pathar No-2	3808	6.9	-Do-	3.43
20				Farm Pond at Jaljali PGR	4928	8.9	-Do-	4.44
21				Farm Pond at Mondira Pathar	7416	20.8	-Do-	10.38
22				Farm Pond at Mondira N.C	9072	16.3	-Do-	8.16
23				Bamboo Spur at Mondira N.C	-	12.5	-Do-	6.26
24				Farm Pond at Daukuchi Village	3164	5.7	-Do-	2.85
25				Earthen Embankment at Nagarbera Village	-	8.8	-Do-	4.38
26				Earthen Distribution Channel at Kalu 0bari Village	3276	5.9	-Do-	2.95
27				Farm Pond at Howlitary village	1092	2.0	-Do-	0.98
28				Farm Pond at Howlitary	1768	3.2	-Do-	1.59

				village				
29				Farm Pond at kalibari Pathar	1162	2.1	-Do-	1.05
30				Farm Pond at Newldoba	2053	3.7	-Do-	1.85
31				Farm Pond at Newldoba	1603	2.9	-Do-	1.44
32				Earthen Embankment at Nizkatmi	-	1.8	-Do-	0.89
33				Farm Pond at Nizkatmi	1609	2.9	-Do-	1.45
34				Farm Pond (Rep.)at Morakolohi	375	0.5	-Do-	0.25
35				Earthen Embankment at Morakolohi	-	0.8	-Do-	0.41
36	Chomaria	DoLR	PMKSY (watershed Development) IWMP	Earthen Embankment at Bogoriguri	-	4.0	-Do-	2.00
37				Farm Pond at Bogoriguri	882	2.5	-Do-	1.23
38				Earthen Embankment at Natunkatmi	-	2.2	-Do-	1.12
39				Farm Pond at Natunkatmi	2283	4.1	-Do-	2.06
40				Earthen embankment at Batiamari	-	7.8	-Do-	3.88
41				Farm Pond at Batiamari	1710	4.8	-Do-	2.39
42				Farm Pond Badlapathar	1384	3.9	-Do-	1.94
43				Earthen Embankment at Dakhin Rangeswari	-	6.9	-Do-	3.43
44				Farm Pond at Dakhin Rangeswari	1512	4.2	-Do-	2.12
45				Farm Pond at Dekachang	1750	3.2	-Do-	1.58
46				Bamboo Spur at Mandiara NC	-	6.3	-Do-	3.13
47				Bamboo Spur at Mandiara NC	-	10.1	-Do-	5.07

48				Farm Pond at Duramari	252	0.7	-Do-	0.35
49				Farm Pond at Duramari	408	1.1	-Do-	0.57
50				Farm Pond at Mandira Pathar	5768	10.4	-Do-	5.19
51				Farm Pond at Mandiara Pathar	6003	16.8	-Do-	8.40
52				Farm Pond at Jalajali PGR	1584	4.4	**2017-18**	2.22
53				Farm Pond at Jalajali PGR	2565	7.2	-Do-	3.59
54				Farm Pond at Jaljali PGR	1864	3.4	-Do-	1.68
55				Farm Pond at Malibari Pathar no.2	1904	3.4	-Do-	1.71
56				Earthen Embankment at Malibari Pathar no.2	-	5.5	-Do-	2.77
57				Farm Pond at Malibari Pathar no.1	3785	6.8	-Do-	3.41
58				Farm Pond at Malibari Pathar no.1	2338	4.2	-Do-	2.10
59				Farm Pond at Nimutari	306	0.9	-Do-	0.43
60	**Chomaria**	**DoLR**	**PMKSY (watershed Development) IWMP**	Farm Pond at Nimutari	495	1.4	-Do-	0.69
61				Farm Pond at Bhakuradia	3222	9.0	-Do-	4.51
62				Earthen Embankment at Bhakurida	-	14.3	-Do-	7.17
63				Farm Pond at Tanganmari	423	1.2	-Do-	0.59
64				Farm Pond at Tanganmari	684	1.9	-Do-	0.96
65				Farm Pond at Choudhuripum	396	1.1	-Do-	0.55
66				Farm Pond at Choudhuripum	641	1.8	-Do-	0.90
67				Farm Pond at Rangeswari	1719	4.8	-Do-	2.41
68				Farm Pond at Rangeswari	1652	3.0	-Do-	1.49

69				Farm Pond Pijupara	3511	9.8	-Do-	4.92
70				Farm Pond at Pijupara	3374	6.1	-Do-	3.04
71				Farm Pond at Tupamari	4737	8.5	-Do-	4.26
72				Farm Pond at Nagarbera	1566	4.4	-Do-	2.19
73				Farm Pond at Nagarbera	3944	7.1	-Do-	3.55
74				Farm Pond at Kalubari	1704	4.8	-Do-	2.39
75				Earthen Embankment at Kaluabari	-	15.0	-Do-	7.50
76				Farm Pond at Daokuchi	1016	2.8	-Do-	1.42
77				Drainage Channel at(Brick) at Baruahgoan	6314	11.4	-Do-	5.68
78				Drainage Channel at Makeli No.2	2688	4.8	-do-	2.42
79				Earthen Embankment at Daokuchi	-	14.6	-Do-	7.31
80				Farm Pond at Jaukatadia	2857.1	8.0	-Do-	4.00
81				Farm Pond at Jaukatadia	2142.9	6.0	-Do-	3.00
82				Farm Pond at Jaukatadia	1428.6	4.0	-Do-	2.00
83				Farm Pond at Jaukatadia	2857.1	8.0	-Do-	4.00
84				Farm Pond at Jaukatadia	2857.1	8.0	-Do-	4.00
85				Farm Pond at Duramari	2500	7.0	-Do-	3.50
86				Farm Pond at Duramari	2500	7.0	-Do-	3.50
87				Farm Pond at Duramari	3357.1	9.4	-Do-	4.70
88	**Chomaria**	**DoLR**	**PMKSY (watershed Development) IWMP**	Farm Pond at Duramari	2500	7.0	-do-	3.50
89				Farm Pond at Duramari	1785.7	5.0	-Do-	2.50
90				Farm Pond at Duramari	2500	7.0	-Do-	3.50
91				Farm Pond at Duramari	2500	7.0	-Do-	3.50
92				Farm Pond at Dakachang	2678.6	7.5	-Do-	3.75

93				Farm Pond at Dakachang	1964.3	5.5	-Do-	2.75
94				Farm Pond at Dakachang	2678.6	7.5	-Do-	3.75
95				Farm Pond at Dakachang	3392.9	9.5	-Do-	4.75
96				Earthen Embankment at Dakachang	-	16.0	-Do-	8.00
97				Earthen Embankment at Dakachang	-	16.0	-do-	8.00
98				Earthen Embankment at Dakachang	-	16.0	-Do-	8.00
99				Farm Pond at Morakalhi	2500	7.0	-Do-	3.50
100				Farm Pond at Morakalhi	2943	8.2	-Do-	4.12
101				Farm Pond at Morakalhi	2500	7.0	-Do-	3.50
102				Farm Pond at Baguriguri	2429	6.8	-Do-	3.40
103				Earthen Embankment at Baguriguri	-	8.4	-Do-	4.20
104				Farm Pond at Baguriguri	3642.9	10.2	-Do-	5.10
105				Farm Pond at Baguriguri	3071.4	8.6	-Do-	4.30
106				Farm Pond at Malibari Pathar	2642.9	7.4	-do-	3.70
107				Farm Pond at Malibari Pathar	2571.4	7.2	-Do-	3.60
108				Earthen Embankment at Malibari Pathar	-	16.2	-Do-	8.12
109				Farm Pond at Malibari Pathar	2928.6	8.2	-Do-	4.10
110				Earthen Embankment at Malibari Pathar	-	14.6	-Do-	7.30
111				Earthen Embankment at Malibari Pathar	-	13.0	-Do-	6.50

112				Farm Pond at Malibari Pathar NC	1642.9	4.6	-Do-	2.30
113	Chomaria	DoLR	PMKSY (watershed Development) IWMP	Farm Pond at Malibari Pathar NC	2571.4	7.2	-Do-	3.60
114				Farm Pond at Malibari Pathar NC	4571.4	12.8	-Do-	6.40
115				Farm Pond at Chamaria Shatra	3000	8.4	-Do-	4.20
116				Farm Pond at Chamaria Shatra	2285.7	6.4	-Do-	3.20
117				Farm Pond at Neuldoba	2500	7.0	-Do-	3.50
118				Earthen Embankment at Neuldoba	-	15.0	-Do-	7.50
119				Farm Pond at howlitary	3000	8.4	-Do-	4.20
120				Farm Pond at howlitary	2500	7.0	-Do-	3.50
121				Earthen Embankment at howlitary	-	8.6	-Do-	4.30
122				Earthen Embankment at howlitary	-	13.0	-Do-	6.50
123				Farm Pond at Kahibari	2943	8.2	-Do-	4.12
124				Farm Pond at Kahibari	2500	7.0	-Do-	3.50
125				Earthen Embankment at Puthimari	-	17.0	-Do-	8.50
126				Farm Pond at Puthimari	2429	6.8	-Do-	3.40
127				Farm Pond at Salmara	2000	5.6	-Do-	2.80
128				Earthen Embankment at Salmara	-	18.2	-Do-	9.10
129				Farm Pond at Batiamari	1643	4.6	-Do-	2.30
130				Farm Pond at Batiamari	2500	7.0	-do-	3.50

131				Earthen Embankment at 2no.Jogipara	-	16.4	-Do-	8.20
132				Farm Pond at 2no.Jogipara	1536	4.3	-Do-	2.15
133				RCC Check at Dam2no.Jogipara	16500	13.3	-Do-	12.00
134				Farm Pond at 1no.Jogipara	2429	6.8	-Do-	3.40
135				Farm Pond at 1no.Jogipara	2500	7.0	-Do-	3.50
136	Chomaria	DoLR	PMKSY (watershed Development) IWMP	Earthen Embankment at 1no.Jogipara	-	15.0	-Do-	7.50
137				RCC Check Dam at 2no.Baruah pathar	18750	16.7	-Do-	15.00
138				RCC Check Dam at 1no.Baruah pathar	17200	15.6	-Do-	14.00
139				RCC Check Dam at 2no.Baruah Gaon	16850	14.4	-Do-	13.00
140				Farm Pond at 1no. Makeli	2571.4	7.2	-Do-	3.60
141				Farm Pond at 1no. Makeli	3000	8.4	-Do-	4.20
142				Farm Pond at 1no. Solapathar	2285.7	6.4	-Do-	3.20
143				Farm Pond at 1no. Solapathar	1357.1	3.8	-Do-	1.90
144				Farm Pond at 2no. Makeli	3071.4	8.6	-Do-	4.30
145				Farm Pond at 2no. Makeli	2642.9	7.4	-Do-	3.70
146				Farm Pond at Trilition	2071.4	5.8	-Do-	2.90
147				Farm Pond at Tamuldi	2500	7.0	-Do-	3.50
148				Farm Pond at Changardia NC	2642.9	7.4	-Do-	3.70
149				Earthen Embankment at Santoli Satra	-	13.0	-Do-	6.50

150				Farm Pond at Santoli Satra	3000	8.4	-Do-	4.20
151				Earthen Embankment at Pathalipara	-	7.0	-Do-	3.50
152				Farm Pond at Pathalipara	3000	8.4	-Do-	4.20
153				Farm Pond at Rowmari	2571	7.2	-Do-	3.60
154				Earthen Embankment at Rowmari	-	7.2	-Do-	3.60
155				Farm Pond at Chaturpara	1857	5.2	-Do-	2.60
156				Farm Pond at Chaturpara	2500	7.0	-Do-	3.50
157				Earthen Embankment at Solosuti	-	15.1	-do-	7.56
158				Farm Pond at Solosuti	2500	7.0	-Do-	3.50
159				Farm Pond at Samariapathar	3071.4	8.6	-Do-	4.30
160	**Chomaria**	**DoLR**	**PMKSY (watershed Development) IWMP**	Earthen Embankment at Nowapara	-	6.4	-Do-	3.20
161				Farm Pond at Nowapara	1857.1	5.2	-Do-	2.60
162				Earthen Embankment at Nowapara	-	6.8	-Do-	3.40
163				Farm Pond at Nowapara	3285.7	9.2	-Do-	4.60
164				Farm Pond at panikhaiti Birajan	2642.9	7.4	-Do-	3.70
165				Farm Pond at panikhaiti Birajan	2071.4	5.8	-Do-	2.90
166				Earthen Embankment at panikhaiti Birajan	-	7.6	-Do-	3.80
167				Farm Pond at Arikarti	2928.6	8.2	-Do-	4.10
168				Earthen Embankment at Arikarti	-	7.0	-Do-	3.50

169				Farm Pond at Arikarti	1928.6	5.4	-Do-	2.70
170				Farm Pond at Kuchirdia pathar	2214.3	6.2	-Do-	3.10
171				Farm Pond at Kuchirdia pathar	2071.4	5.8	-Do-	2.90
172				Farm Pond at Bejarsuti Mandia	2571.4	7.2	**2018-19**	3.60
173				Farm Pond at Bejarsuti Mandia	2928.6	8.2	-Do-	4.10
174				Earthen Embankment at Bejarsuti Mandia	-	15.0	-Do-	7.50
175				Earthen Embankment at 2no.Dakhin Rangapani NC	-	7.0	-Do-	3.50
176				Farm Pond at 2no.Dakhin Rangapani NC	2071.4	5.8	-Do-	2.90
177				Farm Pond at 1no.Dakhin Rangapani NC	1642.9	4.6	-Do-	2.30
178				Earthen Embankment at 1no.Dakhin Rangapani	-	9.0	-Do-	4.50
179				Farm Pond at 2no.Dakhin Rangapani NC	2500	7.0	-Do-	3.50
180	**Chomaria**	**DoLR**	**PMKSY (watershed Development) IWMP**	Farm Pond at 1no.Dakhin Rangapani	3000	8.4	-Do-	4.20
181				Earthen Embankment 3no.Dakhin Rangapani	-	7.2	-Do-	3.60
182				Farm Pond at 3no.Dakhin Rangapani	4428.6	12.4	-do-	6.20
183				Farm Pond at 3no.Uttar Rangapani	2500	7.0	-Do-	3.50
184				Farm Pond at 3no.Uttar Rangapani	3214.3	9.0	-Do-	4.50

185				Earthen Embankment at 2no.Dakhin Rangapani NC	-	20.4	-Do-	10.20
186				Earthen Embankment at 1no.Dakhin Rangapani	-	15.0	-Do-	7.50
187				Farm Pond at Jawkatagoan	2214.3	6.2	-Do-	3.10
188				Farm Pond at Jawkatagoan	2214.3	6.2	-Do-	3.10
189				Farm Pond at Kismat kathmi	1071.4	3.0	-Do-	1.50
190				Farm Pond at Kismat kathmi	1428.6	4.0	-Do-	2.00
191				Farm Pond at Natun kathmi	2214.3	6.2	-Do-	3.10
192				Farm Pond at Natun kathmi	2214.3	6.2	-Do-	3.10
193				Farm Pond at Niz kathmi	1071.4	3.0	-Do-	1.50
194				Farm Pond at Niz kathmi	1428.6	4.0	-Do-	2.00
195				RCC Check Dam at Dowkuchi	16850	14.4	-Do-	13.00
196				RCC Check Dam at Kalubari	18750	16.7	-Do-	15.00
197				RCC Check Dam at Khameri	16750	14.4	-Do-	13.00
198				Farm pond at Nagarbera	2500	7.0	-Do-	3.50
199				Farm pond at Nagarbera	2500	7.0	-Do-	3.50
200				Farm pond at Nagarbera	2964.3	8.3	-Do-	4.15
201				Farm pond at Badalapathar	2571.4	7.2	-Do-	3.60
202				Farm pond at Badalapathar	1857.1	5.2	-do-	2.60
203				Farm pond at Tupamari	2500	7.0	-Do-	3.50
204				Farm pond at Tupamari	2428.6	6.8	-Do-	3.40
205				Farm pond at Mandira NC	2285.7	6.4	-Do-	3.20
206	**Chomaria**	**DoLR**	**(watershed Development**	Farm pond at Mandira NC	2500	7.0	-Do-	3.50

207				Earthen Embankment at Mandira NC	-	9.0	-Do-	4.50
208				Earthen Embankment at Mandira NC	-	10.6	-Do-	5.30
209				Earthen Embankment at Malibari Satra	-	13.0	-Do-	6.50
210				Earthen Embankment at Malibari Satra	-	9.4	-Do-	4.70
211				Earthen Embankment at Nisilamari	-	10.2	-Do-	5.12
212				Earthen Embankment at Nisilamari	-	10.3	-Do-	5.15
213				Farm Pond at Jogipara	2500	7.0	-Do-	3.50
214				Farm Pond at Jogipara	2500	7.0	-Do-	3.50
215				Farm Pond at Mandira Pathar	2500	7.0	-Do-	3.50
216				Earthen Embankment at Mandira Pathar	-	9.5	-Do-	4.75
217				Earthen Embankment at Mandira Pathar	-	10.2	-Do-	5.12
218				Earthen Embankment at Mandira Pathar	-	8.3	-Do-	4.15
219				Farm Pond at Habila Pathar		8.3	-Do-	4.15
220				Farm Pond at Habila Pathar	2500	7.0	-Do-	3.50
221				Farm Pond at Bokhuradiya	3714	10.4	-Do-	5.20
222				Farm Pond at Bokhuradiya	2500	7.0	-Do-	3.50
223				Earthen Embankment at Bokhuradiya	-	11.2	-Do-	5.60

224				Earthen Embankment at Bokhuradiya	-	8.3	-Do-	4.15
225				Farm Pond at Jamlia Village	2500	7.0	-Do-	3.50
226				Farm Pond at Jamlia Village	2500	7.0	-Do-	3.50
227	Chomaria	DoLR	PMKSY (watershed Development) IWMP	Earthen Embankment at Jamlia Village	-	10.6	-Do-	5.30
228				Earthen Embankment at Jamlia Village	-	8.2	-do-	4.12
229				Earthen Embankment at Kalilnapur	-	11.1	-Do-	5.56
230				Farm Pond at Kalilnapur	2857	8.0	-Do-	4.00
231				Farm Pond at Nagarber	2500	7.0	-Do-	3.50
232				Farm Pond at Nagarber	2500	7.0	-Do-	3.50
233				Earthen Embankment at Nagarber	-	13.0	-Do-	6.50
234				Earthen Embankment at Nagarber	-	14.2	-Do-	7.10
235				Drainage channel at 2no. Makeli village	7777	14.0	-Do-	7.00
236				Water Harvesting Pond at 2no Baruah Pathar	5714	16.0	-Do-	8.00
237				Earthen Embankment at Puthimari village	-	16.0	-Do-	8.00
238				Earthen Embankment at Neulduba village	-	18.0	-Do-	9.00
239				Drainage Channel at Kahibari village	9122	16.4	-Do-	8.21

240				Water Harvesting pond at Nagarbera village	5086	14.2	-Do-	7.12
241				Earthen Embankment at Pujupara village	-	18.4	-Do-	9.21
242				RCC Check Dam at Pujupara village	12510	11.3	-Do-	10.21
243				Water Harvesting Pond at Jalmloi village	7229	20.2	-Do-	10.12
244				Water Harvesting Pond at Dalagoan village	6429	18.0	-Do-	9.00
245	Chomaria	DoLR	PMKSY (watershed Development) IWMP	Water Harvesting Pond at Habila Pathar village	7307	20.5	-Do-	10.23
246				Water Harvesting Pond at Jogipara village	7370	20.5	-Do-	10.24
247				Water Harvesting Pond at Nichilamari village	8571	24.0	-Do-	12.00
248				Water Harvesting Pond at Solapathar village	7300	20.3	-Do-	10.14
249				Water Harvesting Pond at Triloson village	7857	22.0	-Do-	11.00
250				Earthen Embankment at Triloson village	-	16.0	-Do-	8.00
251				Reclamation of Swampy Land Development Converted to the Farm Pond of Diglibeel	20160	56.4	-Do-	28.22
252				Reclamation of Swampy Land Development Converted to the Farm Pond of Bagibeel	39600	110.9	-Do-	55.44

253				Reclamation of Swampy Land Development Converted to the Farm Pond of Lesarybeel	39600	110.9	**2019-20**	55.44
254				Reclamation of Swampy Land Development Converted to the Farm Pond of Bagibeel	39600	110.9	-Do-	55.44
255				Reclamation of Swampy Land Development Converted to the Farm Pond of Chandamari beel	28800	88.6	-Do-	44.32
256				Reclamation of Swampy Land Development Converted to the Farm Pond of Gohaipani beel	23400	65.5	-Do-	32.76
257	**Chomaria**	**DoLR**	**PMKSY (watershed Development) IWMP**	Reclamation of Swampy Land Development Converted to the Farm Pond of Dolagaon Namghar beel	14400	40.3	-Do-	20.16
258				Reclamation of Swampy Land Development Converted to the Farm Pond of Gohaibeel (Naitor)	7200	20.1	-Do-	10.07
259				Reclamation of Swampy Land Development Converted to the Farm Pond of Borjob Beel (Naitor)	6300	17.6	-Do-	8.82
260				Reclamation of Swampy Land Development Converted to the Farm Pond of Kumarparabeel	8000	22.4	-Do-	11.20

261				Reclamation of Swampy Land Development Converted to the Farm Pond of Bageswaribeel	61000	110.8	-Do-	55.40
262				Reclamation of Swampy Land Development Converted to the Farm Pond of Burikhuti	14000	39.2	-Do-	19.60
263				Reclamation of Swampy Land Development Converted to the Farm Pond of Choutarabeel	175600	211.7	-Do-	105.84
264				Reclamation of Swampy Land Development Converted to the Farm Pond of Doctorer beel	7000	19.6	-Do-	9.80
265				Reclamation of Swampy Land Development Converted to the Farm Pond of Geel beel	4660	13.1	-Do-	6.55
266	**Chomaria**	**DoLR**	**PMKSY (watershed Development) IWMP**	Reclamation of Swampy Land Development Converted to the Farm Pond of Madhughunabeel	46800	131.0	-Do-	65.52
267				Reclamation of Swampy Land Development Converted to the Farm Pond of Naitor Pubpara beel	9720	27.2	**2020-21**	13.60
268				Reclamation of Swampy Land Development Converted to the Farm Pond of Palpara beel	7600	21.3	-Do-	10.64

269				Reclamation of Swampy Land Development Converted to the Farm Pond of Khamerijan mara nesarary beel	59400	166.3	-Do-	83.16
270				Reclamation of Swampy Land Development Converted to the Farm Pond of Borbeel	1800	50.4	-Do-	25.20
271				Reclamation of Swampy Land Development Converted to the Farm Pond of Sorubeel	8000	22.4	-Do-	11.20
272				Reclamation of Swampy Land Development Converted to the Farm Pond of Akoshibeel	39600	110.9	-Do-	55.44
273				Reclamation of Swampy Land Development Converted to the Farm Pond of Bherbheri	39600	110.9	-Do-	55.44
274				Reclamation of Swampy Land Development Converted to the Farm Pond of Dudurbeel	12600	35.3	-Do-	17.64
275				Reclamation of Swampy Land Development Converted to the Farm Pond of Biskotelbeel	5400	15.1	-Do-	7.56
276	**Chomaria**	**DoLR**	**PMKSY (watershed Development) IWMP**	Reclamation of Swampy Land Development Converted to the Farm Pond of Maajorgaon beell	10700	30.2	-Do-	15.12
277				Reclamation of Swampy Land Development Converted to the Farm Pond of Mahismora bell	7200	20.0	-Do-	10.00

278				Reclamation of Swampy Land Development Converted to the Farm Pond of Koimara beell	10800	30.2	-Do-	15.12
279				Reclamation of Swampy Land Development Converted to the Farm Pond of Nilrdobe beell	57600	161.3	-do-	80.64
280				Reclamation of Swampy Land Development Converted to the Farm Pond ofKhargapara beel	14400	40.3	-Do-	20.16
281				Reclamation of Swampy Land Development Converted to the Farm Pond of Golgomaribeel	6000	16.8	-Do-	8.40
282				Reclamation of Swampy Land Development Converted to the Farm Pond of Patnipar Sibir beel	14000	39.2	-Do-	19.60
283				Reclamation of Swampy Land Development Converted to the Farm Pond of Torabarijan bell	22000	77.6	-Do-	38.80
284				Reclamation of Swampy Land Development Converted to the Farm Pond of Bishnurdoba beel	12000	33.6	-Do-	16.80
285				Reclamation of Swampy Land Development Converted to the Farm Pond of Bakuraduba beell	17000	47.6	-Do-	23.80

286	Chomaria	DoLR	PMKSY (watershed Development) IWMP	Reclamation of Swampy Land Development Converted to the Farm Pond of Botortol beell	12000	33.6	-Do-	16.80
287				Reclamation of Swampy Land Development Converted to the Farm Pond of Doba beel	10800	30.2	-Do-	15.12
288				Reclamation of Swampy Land Development Converted to the Farm Pond of Sarudoba beel	5400	15.1	-Do-	7.56
289				Reclamation of Swampy Land Development Converted to the Farm Pond of Bishnurdoba beel	12000	33.6	-Do-	16.80
290				Reclamation of Swampy Land Development Converted to the Farm Pond of Bakuraduba beell	17000	47.6	-Do-	23.80
291				Reclamation of Swampy Land Development Converted to the Farm Pond of Botortol beell	12000	33.6	-Do-	16.80
292				Reclamation of Swampy Land Development Converted to the Farm Pond of Doba beel	10800	30.2	-Do-	15.12
293				Reclamation of Swampy Land Development Converted to the Farm Pond of Sarudoba beel	5400	15.1	-Do-	7.56
294				Reclamation of Swampy Land Development Converted to the Farm Pond of Lohora	6000	16.8	-Do-	8.40

295				Reclamation of Swampy Land Development Converted to the Farm Pond of Sarulohora beel	5000	14.0	-Do-	7.00
296	Chomaria	DoLR	PMKSY (watershed Development) IWMP	Reclamation of Swampy Land Development Converted to the Farm Pond of Bahiajanbeel	5000	14.0	-Do-	7.00
297				Reclamation of Swampy Land Development Converted to the Farm Pond of Kholiha Doba beel	5400	15.1	-Do-	7.56
298				Water Harvesting Structure at 2no Jogirpara village (3nos)	51136	50.0	-Do-	45.00
299				Water Harvesting Structure at 2no Sdmora village (3nos)	51136	50.0	-Do-	45.00
300				RCC Check Dam at 1no. Jogipara village 3nos	68182	66.7	-Do-	60.00
301				RCC Check Dam at 2no. Jogipara village 2nos	34091	33.3	-Do-	30.00
Total						**4833.8**		**2543.67**

6) Name of Block: Chayani

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY								
S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1		MoWR	AIBP	Major Irrigation				
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation	`2	1089.8	1st,2nd & 3rd Year	2493.72
4		MoWR	HAR Khet Ko Pani	Lift Irrigation	2	174	2nd 3rd & 4th Year	400.2
5		MoWR		Ground Water develpoment (DTW)	42	1250.94	2nd 3rd,4th & 5th Year	2806.69
		MOA & FW-DAC & FW		Ground Water develpoment (STW)	820	1631.65		410
		MOA & FW-DAC & FW		LLP	283	452.15		113.2
5		MoWR		Repairing Works	1	378.86	1st,2nd & 3rd Year	492.51
6		MoWR		RRR of Water Bodies				
7		MoWR		Construction of field channels				

7.1		MoWR		Lined Field Channels				
7.2		MoWR		Unlined Field Channels				
8		MoWR		Micro-Irrigation				
9		MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
10		MOA & FW-DAC & FW		DPAP Sprinkler				
11		MOA & FW-DAC & FW		Non- DPAP Drip	10	10.13	1	7.2818
12		MOA & FW-DAC & FW		Non- DPAP Sprinkler	21	20.42	1	7.38234
13		MOA & FW-DAC & FW	Per drop more crop (Supplementary water management activities)	Topping up of MGNREGA				
14		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures				

15		MOA & FW-DAC & FW		Secondary				
				Storage				
				Structure				
16		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				

Proposed List of Activity for PMKSY(Watershed Development)Under Soil Conservation Department,Kamrup District								
Sl. No.	***Name of the Blocks/Sub Districts***	***Concerned Ministry/ Department***	***Component***	***Activity to be done in PMKSY***	***Total Number/ Capacity (cum)***	***Command Area/Irrigation Potential (Ha)***	***Period of Implementation (5/7yrs)***	***Estimated cost (Rs. in Lakh.)***
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	**Chayanibardwar**	**DoLR**	**PMKSY (Watershed Development),IWMP**	Drainage channel at Lochana village	1511	2.7	**2016-17**	1.36
2				Farm Pond at Lochana village (3nos)	2057	5.8	-Do-	2.88
3				Field Bund at Lochana village	3411	5.8	-Do-	2.90
4				Earthen Channel at Lochana village	3311	6.0	-Do-	2.98
5				Periphery Bund at Sontola village	1647	2.8	-Do-	1.42

6				RCC Check Dam at Sontola Viallge	6375	6.1	-Do-	5.50
7				Earthen drainage Channel at Sontola village	2797	5.0	-Do-	2.52
8				Drainage Channel at Maliata Village	1483	2.7	-Do-	1.33
9				Reclamation of Marcy Land at Maliata Village	2056	5.8	-Do-	2.88
10				Nulla Bund at Maliata village	3408	5.8	-Do-	2.90
11				Earthen drainage Channel at Maliata	3165	5.7	-Do-	2.84
12	Chayanibardwar	DoLR	PMKSY (Watershed Development),IWMP	RCC Check Dam at Salesola village	34091	33.3	-Do-	30.00
13				Drainage Channel at Salesola village	16667	30.0	-Do-	15.00
14				RCC Check Dam at Sathikarpa village pt.1& 2	34091	33.3	-Do-	30.00
15				Drainage Channel at Sathikarpa village	16667	30.0	-Do-	15.00
16				RCC Check Dam at Salesola village Pt.-I & II	37500	33.3	-Do-	30.00
17				Drainage channel (Earthen) at Salesola village	16667	30.0	**2017-18**	15.00
18				RCC Check Dam at S Sathikarpa village Pt.-I & II	37500	33.3	-Do-	30.00
19				Field Bund at Kamargaon village	3562	6.1	Do	3.03
20				Earthen drainage Channel at Kamargaon Village	3398	6.1	Do	3.06
21				Drainage Channel at Kamargaon Village	2130	3.8	Do	1.92
22				Farm Pond at Kamargaon Village	1371	3.8	Do	1.92
23				Periphery Bund at Kamargaon village	2256	3.8	Do	1.92
24				Earthen Channel at Kamargaon village	1632	2.9	-Do-	1.47
25				Drainage Channel at Kamargaon Village	2844	5.1	-Do-	2.56
26	Chayanibardwar	DoLR	PMKSY (Watershed Development),IWMP	Reclamation of Marcy Land at Kamargaon Village	1828	5.1	-Do-	2.56

27				Farm Pond at Kamargaon Village	1371	3.8	-Do-	1.92
28				Periphery Bund at Kamargaon village	2359	4.0	-Do-	2.01
29				Earthen Channel at Kamargaon Village	3787	6.8	-Do-	3.41
30				Drainae Channel at Sathikarpa	16667	30.0	-Do-	15.00
31				RCC Check Dam at Pubrajapara villlage	8250	10.2	-Do-	9.20
32				RCC Check Dam at Pachimpara villlage	8250	10.2	-Do-	9.20
33				Farm Pond at Pachimpara villlage	6363	11.5	-Do-	5.73
34				Farm Pond at Pachimpara village Near P.H.C	4242	7.6	-Do-	3.82
35				Drainage Channel at Baregaon No.1	27000	48.6	-Do-	24.30
36				RCC Check Dam at Baregaon No.2	5400	6.9	-Do-	6.20
37				Drainage Channel at Rani Khamar	10080	18.1	-Do-	9.07
38				RCC Check Dam at Manikpur	10312	11.3	-Do-	10.20
39				RCC Check Dam at Sarurani	10312	11.3	-Do-	10.20
40				Farm Pond at Bongra Village	2057	5.8	**2018-19**	2.88
41				Nulla Bund at Bongra Village	2068	5.8	-Do-	2.90
42				Earthen drainage Channel at Bongra Village	3218	5.8	-Do-	2.90
43				Drainage channel at Sathikarpa village	1167	2.1	-Do-	1.05
44	**Chayanibardwar**	**DoLR**	**PMKSY (Watershed Development),IWMP**	Farm Pond at Sathikarpa village	2057	5.8	-Do-	2.88
45				Nulla Bund at Sathikarpa village	1569	4.4	-Do-	2.20
46				Earthen drainage Channel at Sathikarpa Village	2891	5.2	-Do-	2.60
47				Earthen drainage Channel at Salesala Viallge	2982	5.4	-Do-	2.68

48				Farm Pond at Kaitasidhi Village	2057	5.8	-Do-	2.88
49				Nulla Bund at Kaitasidhi Village	2104	5.9	-Do-	2.95
50				Earthen drainage Channel at Kaitasidhi Village	3484	6.3	-Do-	3.14
51				Drainage Channel at Dole gaon village	2954	5.3	-Do-	2.66
52				Farm Pond at Dole gaon village	2057	5.8	-Do-	2.88
53				Periphery Bunda at Dole gaon village	3222	5.8	-Do-	2.90
54				RCC Check Dam at Karapara	4050	6.4	-Do-	5.80
55				RCC Check Dam at Mambasti	4050	6.4	-Do-	5.80
56				RCC Check Dam at Bok Dobha village	4050	6.4	-Do-	5.80
57				RCC Check Dam at Dahajatia village	10312	11.3	-Do-	10.20
58				RCC Check Dam at Haropara village	5400	6.9	-Do-	6.20
59				Drainage Channel with Boulder check Dam at Dahajatia village	21600	38.9	-Do-	19.44
60				RCC check Dam at Dahajatia village	8250	10.2	-Do-	9.20
61				Drainage Channel with Boulder check Dam at Dighal Kuchi	2700	48.6	-Do-	24.30
62	**Chayanibardwar**	**DoLR**	**PMKSY (Watershed Development),IWMP**	Drainage Channel with Boulder check Dam at Dahajatia village	11880	21.4	-Do-	10.69
63				Drainage Channel with Boulder check Dam at Jaji village	11880	21.4	-Do-	10.69
64				Drainage Channel with Boulder check Dam at Dahajatia village	11880	21.4	-Do-	10.69

65				Drainage Channel with Boulder check Dam at Jaji village	11880	21.4	-Do-	10.69
66				Drainage Channel with Boulder check Dam at Pathalipara village	17280	31.1	**2019-20**	15.55
67				RCC check Dam at Pathalipara village	4050	6.4	-Do-	5.80
68				Drainage Channel with Boulder check Dam at Batakuchi village	12960	23.3	-Do-	11.66
69				Drainage Chanel from Kulshi River at Ghoramara village	17280	31.1	-Do-	15.55
70				RCC Check Dam at Ghoramara village	4050	6.4	-Do-	5.80
71				Drainage Chanel from Mora Suti of Kulsi River at Titua Gaon	21600	38.9	-Do-	19.44
72				RCC Check Dam at Bagapani	5400	6.9	-Do-	6.20
73				Drainage Channel with Boulder Check Dam at Moravitha village	11520	20.7	-Do-	10.37
74				Drainage Channel with Boulder check Dam at Dighal Kuchi village	14400	25.9	5/7 yrs	12.96
75				Drainage Channel with Boulder check Dam at Salbari village	17280	31.1	-Do-	15.55
76	**Chayanibardwar**	**DoLR**	**PMKSY (Watershed Development),IWMP**	Drainage Channel with Boulder check Dam at Salbari village	21600	38.9	-Do-	19.44
77				Perephery Bund at Sontola village		2.8	-Do-	1.42
78				RCC Check Dam at Sontola Viallge	6375	6.1	-Do-	5.50
79				Earthen drainage Channel at Sontola village	2797	5.0	-Do-	2.52

80				Drainage Channel at Maliata Village	1483	2.7	-Do-	1.33
81				Reclamation of Marcy Land at Maliata Village	-	5.8	-Do-	2.88
82				Nulla Bund at Maliata village	-	5.8	-Do-	2.90
83				Earthen drainage Channel at Maliata	3165	5.7	-Do-	2.84
84				Farm Pond at Bongra Village	2057	5.8	-Do-	2.88
85				Nulla Bund at Bongra Village	-	5.8	-Do-	2.90
86				Earthen drainage Channel at Bongra Village	3219	5.8	-Do-	2.90
87				Farm Pond at Kaitasidhi Village	2057	5.8	-Do-	2.88
88				Nulla Bund at Kaitasidhi Village	-	5.9	**2016-17**	2.95
89				Earthen drainage Channel at Kaitasidhi Village	3484	6.3	-Do-	3.14
90				Earthen drainage Channel at Salesala Viallge	2982	5.4	-Do-	2.68
91				Drainage channel at Sathikarpa village	1167	2.1	-Do-	1.05
92				Farm Pond at Sathikarpa village	2057	5.8	-Do-	2.88
93	**Chayanibardwar**	**DoLR**	**PMKSY (Watershed Development),IWMP**	Nulla Bund at Sathikarpa village		4.4	-Do-	2.20
94				Earthen drainage Channel at Sathikarpa Village	2892	5.2	-Do-	2.60
95				Drainage Channel at Kamargaon village	1593	2.9	-Do-	1.43
96				Field Bund at Kamargaon village		6.1	**2017-18**	3.03
97				Earthen Channel at Kamargaon village	3398	6.1	-Do-	3.06
98				Drainage channel at Lochana village	1510	2.7	-Do-	1.36
99				Drainage channel at Lochana village	1510	2.7	-Do-	1.36

100				Farm Pond at Lochana village (3nos)	2057	5.8	-Do-	2.88
101				Field Bund at Lochana village	-	5.8	-Do-	2.90
102				Earthen Channel at Lochana village	3315	6.0	-Do-	2.98
103				Earthen Bund at Chautalagoan	2805	4.5	-Do-	2.24
104				Water Distribution channel at Mohamorang	854	1.5	-Do-	0.77
105				Farm Pond at Mohamroang village	888	2.5	**2019-20**	1.24
106				Earthen Bund at 1no. Sachalpara village	1732	2.8	-Do-	1.39
107				Earthen Bund at 1no. Sachalpara village	2805	4.5	-Do-	2.24
108				Farm Pond at 1no. Sachalpara	1008	2.8	-Do-	1.41
109				Water Distribution channel at 1no.Sachalpara village	2538	4.6	-Do-	2.28
110	**Chayanibardwar**	**DoLR**	**PMKSY (Watershed Development),IWMP**	Earthen Bund at Chautalagoan	1732	2.8	-Do-	1.39
111				Earthen Bund at Chautalagoan	2805	4.5	-Do-	2.24
112				Drainage Channel at Solechala	900	16.2	-Do-	8.10
113				Farm Pond at koitasiddhi	3900	8.4	-Do-	4.20
114				RCC Structure at Sathikorapa	4000	9.6	-Do-	8.64
115				RCC Structure at Sathikorapa	4000	9.6	-Do-	8.64
116				Earthen Bund at Chautalagoan	2805	4.5	-Do-	2.24
117				Farm Bunding at Parakuchi	6000	10.8	-Do-	5.40
118				Drainage Channel at Dalegaon village	2954	5.3	-Do-	2.66
119				Farm Pond at Dalegaon village	2057	5.8	-Do-	2.88
120				Periphery Bunda at Dalegaon village	-	5.8	-Do-	2.90
121				Water distribution Channel at Mahmarang	1708	3.1	-Do-	1.54

122				Water distribution Channel at 1no.Sachalpara village	3160	5.7	-Do-	2.84
123				Farm Pond at Chontalagaon village	1980	5.5	-Do-	2.77
124				Horticulture plantation at Baregaon-2 village (Billpara)	-	3.0	-Do-	4.20
125				Excavation of drainage Channel at Sonapur Nijora of Baregaon-2 Vill.	13500	24.3	-Do-	12.15
126				Excavation of drainage Channel at Baregaon-2 Vill.	13500	24.3	-Do-	12.15
127				Excavation of Community Farm Pond near village graveyard of Baregaon-1	9000	25.2	-Do-	12.60
128				Excavation of drainage Channel connecting to Kolia Nijora at Baregaon-1	33670	60.6	-Do-	30.30
129	Chayanibardwar	DoLR	PMKSY (Watershed Development),IWMP	Horticulture plantation at Kolia Nijora par at Baregaon-1	-	1.7	-Do-	2.38
130				Excavation of Community Farm Pond at Baregaon-1	6000	16.8	-Do-	8.40
131				Excavation of drainage Channel near M. E. school at Baregaon-1	10500	18.9	-Do-	9.45
132				Excavation of drainage Channel from Dewan beel to Kulsi River at Kulsi village	9600	17.3	-Do-	8.64
133				RCC drop Spill Way at the drainage Channel from Dewan beel to Kulsi River-4nos	28409	27.8	-Do-	25.00
134				Water Harvesting Tank for the Stream Water at Galaya of Kulsi village	3600	10.1	-Do-	5.04
135				Horticulture Plantation at Kulsi village	-	0.7	-Do-	0.98

136				Horticulture plantation (Orange, Banana,Pineapple) at Kulsi village	-	20.0	-Do-	28.00
137				Excavation of drainage Channel at Kulsi Bhangagarh at Kulsi village	2400	4.3	-Do-	2.16
138				Desilting, Restoration & Reexcavation of Dangor Bill at Village Rani khamar	30000	72.0	-Do-	36.00
139				Excavation of Drainage Channel of Agriculture Field at Rani khamar	7500	13.5	-Do-	6.75
140	Chayanibardwar	DoLR	PMKSY (Watershed Development),IWMP	Horticulture Plantation at Rani khamar Village	-	5.0	-Do-	7.00
141				Water Harvesting Structure at Rani khamar Village-4nos	17045	16.7	-Do-	15.00
142				Desilting, Restoration & Re- Excavation of Dangor bell at Rani Village	3000	7.2	-Do-	3.60
143				Excavation of Drainage Channel from Borgorom Para to Bangali Bila	18000	32.4	-Do-	16.20
144				Horticultural Plantation at Borgorom Para of Bangali Bila	-	4.0	-Do-	5.60
145				Excavation of Community Pond near L.P. School at Bangali Bila	6000	16.8	-Do-	8.40
146				Renovation of Farm Pond at Uruput -2 Nos	12000	33.6	-Do-	16.80
147				Farm Bunding at Parakuchi	6000	10.8	**2020-21**	5.40
148				Excavation of Farm Pond at Uruput with Horticulture plantation.	5000	14.0	-Do-	7.00
149				Excavation of Drainage Channel at Amringa	5000	9.0	-Do-	4.50
150				Farm Pond at Haropara village	1029	2.9	-Do-	1.44

151				Farm Pond(Rep.) at Mohmorang village	392	1.1	-Do-	0.55
152				Water Distribution channel at 2no. sachalpara	930	1.7	-Do-	0.84
153				Farm Pond (Rep.) at Dorchala village	546	1.5	-Do-	0.77
154	Chayanibardwar	DoLR	PMKSY (Watershed Development),IWMP	Farm Pond (Rep.) at Pothalipara village	354	1.0	-Do-	0.50
155				Farm Pond at Dhajaatia village	990	2.8	-Do-	1.39
156				Farm Pond at Haropara village	2880	8.1	-Do-	4.03
157				Water Distribution channel at Nagoan vill.	5292	9.5	-Do-	4.76
158				Farm Pond at Nagoan village	3402	9.5	-Do-	4.76
159				Drainage channel at Salbari village	1736	3.1	-Do-	1.56
160				Drainage channel at 3.no.Sachalpara village	2604	4.7	-Do-	2.34
161				RCC Check Dam at Birogaon village	6960	8.5	-Do-	7.69
162				Drainage channel at Satpur village	4676	8.4	-Do-	4.21
163				Drainage channel at Dhanipara village	2632	4.7	-Do-	2.37
164				Drainage channel at Dhenger Gaon village	1156	2.1	-Do-	1.04
165				Drainage channel at Ghoramara village	4872	8.8	-Do-	4.38
166				RCC Check Dam at Batakuchi village	6000	5.3	-Do-	4.76
167				Farm Pond at Tituagaon village	1872	5.2	-Do-	2.62
168				Farm Pond at Pathalipara village	990	2.8	-Do-	1.39
169				RCC Check Dam at Moravita village	7012.5	7.5	-Do-	6.74
170				RCC Check Dam at Moravita village	13100	12.1	-Do-	10.91
171				Water Distribution channel at Dighalkuchi	2702	4.9	-Do-	2.43
172	Chayanibardwar	DoLR	PMKSY (Watershed Development) ,IWMP	Earthen Bund at Dighalkuchi village	4922	7.9	-Do-	3.94
173				Earthen Bund at Dahajatia village	866	1.4	-Do-	0.69
174				Earthen Bund at Dahajatia village	1403	2.2	-Do-	1.12

175				Water Distribution channel at Dahajatia	3458	6.2	-Do-	3.11
176				Water Distribution channel at Salbari village	1405	2.5	-Do-	1.26
177				Water Distribution channel at 3No.Sachalpara village	1302	2.3	-Do-	1.17
178				Water Distribution channel at 3No.Sachalpara village	2108	3.8	-Do-	1.90
179				Earthen Bund at Darchala village	1339	2.1	-Do-	1.07
180				Earthen Bund at Darchala village	2168	3.5	-Do-	1.73
181				Earthen Bund at Darogaon village	4804	7.7	-Do-	3.84
182				RCC check Dam at Birogaon village	6737	6.9	-Do-	6.22
183				Farm Pond at Satpur village	1503	4.2	-Do-	2.10
184				Earthen Embankment at Satpur village	-	6.8	-Do-	3.41
185				Water Distribution channel at Madanpur	532	1.0	-Do-	0.48
186				Water Distribution channel at Madanpur	861	1.6	-Do-	0.78
187				Farm Pond at Dhonipara	846	2.4	-Do-	1.18
188	**Chayanibardwar**	**DoLR**	**PMKSY (Watershed Development),IWMP**	Water Distribution channel at Dhonipara	2130	3.8	-Do-	1.92
189				Water Distribution channel at Dengergaon	920	1.7	-Do-	0.83
190				Water Distribution channel at Dengergaon	771	1.4	-Do-	0.69
191				Farm Pond at Ghoramara village	1567	4.4	-Do-	2.19
192				Water Distribution channel at Ghoramara	3944	7.1	-Do-	3.55

193				Earthen bund at Batakuchi village	2977	4.8	-Do-	2.38
194				Earthen bund at Batakuchi village	4819	7.7	-Do-	3.86
195				Water Distribution channel at Tituwagaon	1456	2.6	-Do-	1.31
196				Water Distribution channel at Tituwagaon	2357	4.2	-Do-	2.12
197				Earthen Bund at Pothalipara village	866	1.4	-Do-	0.69
198				Earthen Bund at Pothalipara village	1244	2.2	-Do-	1.12
199				RCC Check Dam Salbari Village	6800	8.0	-Do-	7.20
200				Drainage Channel with Boulder check Dam at Dhunipara village	8640	15.6	-Do-	7.78
201				RCC Check Dam Dhunipara Village	3900	7.1	-Do-	6.40
202	Chayanibardwar	DoLR	PMKSY (Watershed Development),IWMP	Drainage Channel with Boulder check Dam at Dhengargaon village	21600	38.9	-Do-	19.44
203				RCC Check Dam at Karapara village	4090	6.4	-Do-	5.80
204				RCC Check Dam at mam Basti	4090	6.4	-Do-	5.80
205				RCC Check Dam at Bok Dobha village	4090	6.4	-Do-	5.80
206				RCC Check Dam at Sasal Para No.1	4090	6.4	-Do-	5.80
207				RCC Check Dam at Sasal Para No.2	4090	6.4	-Do-	5.80
208				Drainage Channel with Boulder check Dam at Kochpara village	7200	13.0	-Do-	6.48
209				Drainage Channel with Boulder check Dam at Losana village	7200	13.0	-Do-	6.48
210				Drainage Channel with Boulder check Dam at Salesala village	15120	27.2	-Do-	13.61

211				Drainage Channel with Boulder check Dam at Amranga village	5760	10.4	-Do-	5.18
212				RCC Check Dam at Banduan Tea Garden No.1	5400	6.9	-Do-	6.20
213				RCC Check Dam at Khokapara river	10312	11.3	-Do-	10.20
Total						**2195.6**		**1301.81**

7) Name of Block: Chaygaon

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY								
S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1		MoWR	AIBP	Major Irrigation				
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation	1	100.85	1st,2nd & 3rd Year	242.04
4		MoWR	HAR Khet Ko Pani	Lift Irrigation				
5		MoWR		Flow Irrigation	2	159	2nd,3rd & 4th Year	
5		MoWR		Ground Water develpoment (DTW)	36	1014.3	2nd,3rd,4th & 5th Year	2376
5		MOA & FW-DAC & FW		Ground Water develpoment (STW)	633	1994.87	1st,2nd & 3rd Year	345.6
5		MOA & FW-DAC & FW		LLP	149	265.05	1st & 2nd Year	72
6		MoWR		RRR of Water Bodies				
7		MoWR		Construction of field channels				

7.1		MoWR		Lined Field Channels				
7.2		MoWR		Unlined Field Channels				
8		MoWR		Micro-Irrigation				
9		MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
10		MOA & FW-DAC & FW		DPAP Sprinkler				
11		MOA & FW-DAC & FW		Non- DPAP Drip				
12		MOA & FW-DAC & FW		Non- DPAP Sprinkler				
13		MOA & FW-DAC & FW	Per drop more crop (Supplementary water management activities)	Topping up of MGNREGA				
14		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures	25	376.12	1st & 2nd Year	173.1

15		MOA & FW-DAC & FW		Secondary Storage Structure				
16		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				
21		State Planned Scheme of Irrigation						
21.1		State Irrigation Department	Name of the scheme	Major Irrigation				
21.2		State Irrigation Department	Name of the scheme	Medium Irrigation				
21.3		State Irrigation Department	Sidilapara FIS	Surface Minor Irrigation	1	85	1st & 2nd Year	228
22		Irrigation Scheme of State Agriculture Department	Name of the scheme					
23		Irrigation Scheme of State Agriculture Department	Name of the scheme					
24		Externally aided projects	Name of the scheme					

25		other loan projects like NABARD	DTW Repair	Ground Water develpoment (DTW)	2	60	1st Year	30

Proposed List of Activity for PMKSY(Watershed Development)Under Soil Conservation Department,Kamrup District								
Sl. No.	***Name of the Blocks/Sub Districts***	***Concerned Ministry/ Department***	***Component***	***Activity to be done (already included in IWMP DPR)***	***Total Number/ Capacity (cum)***	***Command Area/Irrigation Potential (Ha)***	***Period of Implementation (5/7yrs)***	***Estimated cost (Rs. in Lakh.)***
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	**Chhaygaon**	**DoLR**	**PMKSY(Watershed Development, IWMP)**	Drainage channel Reclamation at Bakalipara village	3944	7.1	***2016-17***	3.55
2				Reclamation of Community Pond at Bakalipara	3243	9.1	-Do-	4.54
3				Reclamation of Community Pond at Bakalipara	2700	7.6	-Do-	3.78
4				Horticulture Plantation at Bakalipara	-	1.0	-Do-	1.45
5				Drainage channel Reclamation at Andheri village	3556	6.4	-Do-	3.20
6				Periphery Bund at Andheri Village	1617	2.6	-Do-	1.31

7				Horticulture Plantation at Andheri Village	-	0.2	-Do-	0.40
8				Horticulture Plantation at Andheri Village	-	0.6	-Do-	0.85
9				Horticulture Plantation at Andheri Village	-	0.1	-Do-	0.19
10				RCC Water Harvesting Structure at Balijuri	24500	21.7	-Do-	19.50
11				Reclamation of Marshy Land at Dhakua Para Village	6885	19.3	**2017-18**	9.64
12	**Chhaygaon**	**DoLR**	**PMKSY(Watershed Development, IWMP)**	Reclamation of Community Pond at Dhakua Para Village	2700	7.6	-Do-	3.8
13				Agril Bund at Dhakua Para Village	2975	4.8	-Do-	2.4
14				Slab Culvert at Dhakua Para Village	-	2.0	-Do-	1.0
15				Horticulture Plantation at Dhakua Para Village	-	3.1	-Do-	1.6
16				RCC Check Dam at Dhakua Para Village	17700	14.2	-Do-	12.8
17				Horticulture plantation at Jogibari		1.2	-Do-	1.70
18				Farm Pond at Jogibari	2500	7.0	-Do-	3.50
19				Argil Budn at Jogibari	1889	3.1	-Do-	1.53
20				Drainage Channel Reclamation at Dulia Gaon	5522	9.9	-Do-	4.97

21				Agril Bund at Dulia Gaon	2732	3.9	-Do-	1.97
22				Slab Culvert at Dulia Gaon	-	2.0	-Do-	1.00
23				Reclamation of Community Pond at Pachim Dhuli Village	3243	9.1	-Do-	4.54
24				Periphery Bund at Pachom Dhuli Village	4062	6.6	*Do*	3.29
25				Horticulture Plantation at Pachim Dhuli Village	-	2.9	-Do-	1.45
26				Drainage Channel Reclamation at Pub Dhuli Gaon	3156	5.7	-Do-	2.84
27				Agril Bund at Pub Dhuli Gaon	3247	5.3	-Do-	2.63
28	**Chhaygaon**	**DoLR**	**PMKSY(Watershed Development, IWMP)**	Slab Culvert at Pub Dhuli Gaon	-	2.0	**2018-19**	1.00
29				Horticulture Plantation at Pub Dhuli Village	-	1.0	-Do-	1.45
30				Agril Bund at Mazpara Village	4864	7.9	-Do-	3.94
31				Slab Culvert at Mazpara Village	-	2.0	-Do-	1.00
32				Horticulture Plantation at Mazpara Village	-	1.0	-Do-	1.45
33				Drainage Channel Reclamation at 2 No. Balasidhi Village	9078	16.3	-Do-	8.17

34				Horticulture Plantation at 2 No. Balasidhi Village	-	0.5	-Do-	0.72
35				Horticulture Plantation at 2 No. Balasidhi Village	-	0.5	-Do-	0.72
36				Reclamation of Sandy Land at 1 No. Balasidhi	-	4.9	-Do-	2.43
37				Agril Bund at 1 No. Balasidhi	2160	3.5	-Do-	1.75
38				Agril Bund at 1 No. Balasidhi	2703	4.4	-Do-	2.19
39				Slab Culvert at 1 No. Balasidhi	-	2.0	-Do-	1.00
40				Argil Bund at Jogibari	2432	3.1	-Do-	1.53
41				Horticulture Plantation at Ratanpur No.2 Village	-	1.0	-Do-	1.45
42				Excavation of Drainage Channel at Kushalpara	8000	14.4	-Do-	7.20
43				Excavation of Drainage Channel at Balijuri	5520	9.9	-Do-	4.97
44	**Chhaygaon**	**DoLR**	**PMKSY(Watershed Development, IWMP)**	Excavation of Drainage Channel at Balijuri vie Balshidi Bakrapara, Nowapara to Kukurmara river	38250	68.9	-Do-	34.43
45				Horticulture Plantation at 1 No. Balasidhi Village	-	0.2	-Do-	0.29
46				Horticulture Plantation at 1 No. Balasidhi Village	-	0.8	*Do*	1.16
47				Reclamation of Community Pond at Nowapara Village	2971	8.3	-Do-	4.16

48				Agril Bund at Nowapara Village	2704	4.4	-Do-	2.19
49				Agril Bund at Nowapara Village	2704	4.4	-Do-	2.19
50				Slab Culvert at Nowapara Village	-	2.0	-Do-	1.00
51				Horticulture Plantation at Nowapara Village	-	2.9	-Do-	1.45
52				Drainage Channel Reclamation at Bihdia Village	4733	8.5	-Do-	4.26
53				Reclamation of Community Pond at Bihdia Village	2971	8.3	-Do-	4.16
54				Reclamation of Community Pond at Bihdia Village	3243	9.1	-Do-	4.54
55				Agril Bund at Bihdia	2432	3.9	-Do-	1.97
56				Horticulture Plantation at Bihdia Village	-	1.0	-Do-	1.45
57				Excavation of Drainage Channel at Barbakra	5400	9.7	-Do-	4.86
58				Excavation of Drainage Channel at Sainyashi	36000	6.8	-Do-	3.42
59	**Chhaygaon**	**DoLR**	**PMKSY(Watershed Development, IWMP)**	RCC Rain Water Harvesting Structure at Jaruagoan	8000	8.7	-Do-	7.80
60				Earthen Embankment at Langkar	9000	16.2	-Do-	8.10
61				Excavation of Drainage Channel at Barjhar	4500	8.1	-Do-	4.05

62				Excavation of Drainage Channel at Karikhara	3150	5.7	-Do-	2.84
63				Earthen Embankment at Dakhin Bangkata	4500	8.1	-Do-	4.05
64				Earthen Embankment at Choudhurykhat	6750	12.2	-Do-	6.08
65				Earthen Embankment at Kalbakra	13500	24.3	-Do-	12.15
66				Excavation of Drainage Channel Brick at Kalbkra	3150	72.8	-Do-	36.40
67				Reclamation of Marshy Land at Dhekenabori Village	6750	18.9	-Do-	9.45
68				Slab Culvert at Dhekenabori Village	-	2.0	**2019-20**	1.00
69				Periphery Bund at Dhekenabori Village	4062	6.6	-Do-	3.29
70				Horticulture Plantation at Dhekenabori Village	-	2.9	-Do-	1.45
71				Drainage Channel Reclamation at Dagaon Katahi Village	7889	14.2	*Do*	7.10
72				Drainage Channel Reclamation at Dagaon Katahi Village	5522	9.9	-Do-	4.97
73				Reclamation of Marshy Land/Community Pond at Dagaon Village	4050	11.3	-Do-	5.67
74	**Chhaygaon**	**DoLR**	**PMKSY(Watershed Development, IWMP)**	Community Pond at Dagaon Village	843	2.4	-Do-	1.18

75				Community Pond at Dagaon Village	843	2.4	-Do-	1.18
76				Horticulture Plantation at Dagaon Village	-	1.0	-Do-	1.45
77				Reclamation of Marshy Land at Makeli Village	7557	21.2	-Do-	10.58
78				Agril Bund at Makeli Village	2160	3.5	-Do-	1.75
79				Horticulture Plantation at Makeli Village	-	2.9	-Do-	1.45
80				Drainage Channel Reclamation at Dhobargaon Village	3944	7.1	-Do-	3.55
81				Reclamation of Community Pond at Dhobargaon Village	3243	9.1	-Do-	4.54
82				Agril Bund at Dhobargaon Village	2975	4.8	-Do-	2.41
83				Slab Culvert at Dhobargaon Village	-	2.0	-Do-	1.00
84				Horticulture Plantation at Dhobargaon Village	-	1.0	*Do*	1.45
85				Drainage Channel Reclamation at Kaimari Village	3944	7.1	-Do-	3.55
86				Drainage Channel Reclamation at Kaimari Village	2767	5.0	-Do-	2.49

87				Construction of Drainage Channel at Kaimari Village	1978	3.6	-Do-	1.78
88	Chhaygaon	DoLR	PMKSY(Watershed Development, IWMP)	Agril Bund at Kaimari Village	2188	3.5	-Do-	1.75
89				Horticulture Plantation at Kaimari Village	-	1.0	-Do-	1.45
90				Construction of Water Reservoir at Patgaon Kharbakhar	6250	10.0	-Do-	5.00
91				Periphery Bund at Patgaon Kharbakhar Village	2704	4.4	-Do-	2.19
92				Horticulture Plantation at Kharbakhar Village	-	1.0	-Do-	1.45
93				Horticulture Plantation at Batakuchi	-	1.3	-Do-	1.75
94				Slab Culvert at Ratanpur No.1 Village	-	2.0	-Do-	1.00
95				R.C.C. Check Dam at Ratanpur No.1	9900	9.5	Do	8.51
96				Drainage Channel Reclamation at Nowamati Village	4344	7.8	-Do-	3.91
97				Graded Bund at Nowamati Village	3247	5.3	-Do-	2.63
98				R.C.C. Check Dam at Nowamati	13300	11.3	**2020-21**	10.16

99				Horticulture Plantation at Nowamati Village	-	2.9	-Do-	1.45
100				Agril Bund at Batakuchi Village	1889	3.1	-Do-	1.53
101				Agril Bund at Batakuchi Village	2432	3.9	-Do-	1.97
102				Agril Bund at Batakuchi Village	2704	4.4	-Do-	2.19
103	Chhaygaon	DoLR	PMKSY(Watershed Development, IWMP)	Slab Culvert at Batakuchi Village	-	2.0	-Do-	1.00
104				Horticulture Plantation at Batakuchi Village	-	1.0	-Do-	1.45
105				Reclamation of Community Pond at Phalaghat Village	3243	9.1	-Do-	4.54
106				Agril Bund at Phalaghat Village	2432	3.9	-Do-	1.97
107				Slab Culvert at Phalaghat Village	-	2.0	-Do-	1.00
108				Horticulture Plantation at Phalaghat Village	-	1.0	-Do-	1.45
109				Reclamation of Marshy Land at Ratanpur No.2 Village	7021	19.7	-Do-	9.83
110				Nulla Bund at Ratanpur No.2 Village	-	4.3	-Do-	2.13
111				Slab Culvert at Ratanpur No.2 Village	-	2.0	-Do-	1.00
112				RCC Check Dam at Ratanpur No.2 Village	9925	9.5	-Do-	8.51

113				Excavation of Drainage Channel Brick at Phulguri	2250	52.0	-Do-	26.00
114				Excavation of Farm Pond at Rahpur	10500	29.6	Do	14.78
Total						**879.6**		**485.203**

8) Name of Block: Goroimari

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY								
S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1		MoWR	AIBP	Major Irrigation				
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation				
4		MoWR	HAR Khet Ko Pani	Lift Irrigation	1	69	1st & 2nd Year	158.7
5		MoWR		Ground Water develpoment (DTW)	23	670	2nd, 3rd, 4th & 5th Year	1518
9		MOA & FW-DAC & FW		Ground Water develpoment (STW)	1674	3384.62	1st & 2nd Year	376.65
9		MOA & FW-DAC & FW		LLP	290	384.56	1st & 2nd Year	174
5		MoWR		Revival of ELIS (Singimari ELIS)	1	60	1st & 2nd Year	138
6		MoWR		RRR of Water Bodies				

7		MoWR		Construction of field channels				
7.1		MoWR		Lined Field Channels				
7.2		MoWR		Unlined Field Channels				
8		MoWR		Micro-Irrigation				
9		MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
10		MOA & FW-DAC & FW		DPAP Sprinkler				
11		MOA & FW-DAC & FW		Non- DPAP Drip				
12		MOA & FW-DAC & FW		Non- DPAP Sprinkler				
13		MOA & FW-DAC & FW	Per drop more crop (Supplementary water management activities)	Topping up of MGNREGA				
14		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures	6	89.325		33.6

15		MOA & FW-DAC & FW		Secondary				
				Storage				
				Structure				
16		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				

Proposed List of Activity for PMKSY(Watershed Development)Under Soil Conservation Department,Kamrup District								
Sl. No.	***Name of the Blocks/Sub Districts***	***Concerned Ministry/ Department***	***Component***	**Proposed Activity**	***Total Number/ Capacity (cum)***	***Command Area/Irrigation Potential (Ha)/No.***	***Period of Implementation (5/7yrs)***	***Estimated cost (Rs. in Lakh.)***
1	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***
1	**Garaimari**	**DoLR**	**PMKSY (watershed Development) IWMP**	Earthen Embankment at Tukrapara village	-	14.2	***2016-17***	7.12
2				Drainage channel Barakhat village	6777	12.2	-Do-	6.10

3				Earthen Embankment at Barakhat village	-	24.2	-Do-	12.10
4				Earthen Embankment at Barakhat village	-	16.8	-Do-	8.41
5				Earthen Bund at Hatisalapam village	10133	18.2	-Do-	9.12
6				Drainage channel at Hatisalapam village	10722	19.3	-Do-	9.65
7				Drainage channel at Hatislagaon village	10500	18.9	-Do-	9.45
8				Drainage channel at Karaibil village	7222	13.0	**2017-18**	6.50
9				Earthen Bund at Parugaon village	6667	12.0	-Do-	6.00
10				RCC Check Dam at Parugaon	6960	14.5	-Do-	7.23
11	**Garaimari**	**DoLR**	**PMKSY (watershed Development) IWMP**	Drainage channel at Nadiapara village	8889	16.0	-Do-	8.00
12				Drainage channel at Jambari village	7778	14.0	-Do-	7.00
13				Earthen Bund at Jambari village	9133	16.4	-Do-	8.22
14				Water Harvesting Pond at Jambari village	7857	22.0	-Do-	11.00
15				RCC Check Dam at Choudhuripara	8350	9.0	-Do-	8.12
16				RCC Check Dam at Santipur Village	6920	7.9	-Do-	7.15

17				Water Harvesting Pond at Nizbogai village	8571	24.0	-Do-	12.00
18				Drainage channel at Milaghal village	8889	16.0	-Do-	8.00
19				Earthen Embankment at Kanhara village		30.0	-Do-	15.00
20				Earthen Embankment at Garaimari Satra		50.0	-Do-	25.00
21				Earthen Embankment at Tukrapara Village		40.0	**2018-19**	20.00
22				Drainage channel at Barakhat village	11111	20.0	-Do-	10.00
23				Earthen Embankment at Barakhat village		30.0	-Do-	15.00
24				Earthen Bund at Majortup Village	22222	40.0	-Do-	20.00
25				Earthen Bund at Hatisalapam	22222	40.0	-Do-	20.00
26	**Garaimari**	**DoLR**	**PMKSY (watershed Development) IWMP**	Drainage channel at Hatisalapam	27778	50.0	-Do-	25.00
27				Drainage channel at Hatisala Gaon	16667	30.0	-Do-	15.00
28				Drainage channel at Kanaibil Village	13333	24.0	-Do-	12.00
Total						**642.8**		**328.17**

9) Name of Block: Hajo

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY								
S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1		MoWR	AIBP	Major Irrigation				
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation	1	450		170.83
4		MoWR		Lift Irrigation	1	360		143.07
		MoWR	HAR Khet Ko Pani	ELIS	8	1525	1st,2nd, 3rd & 4th Year	3060
		MoWR		Repair Work (ELIS)	1	340	1st& 2nd Year	15
5		MoWR		Ground Water develpoment (DTW)	124	2748	1st,2nd, 3rd,4th & 5th Year	5406
		MoWR		Restoration of DTWS	8	237	1st & 2nd Year	469
		MOA & FW-DAC & FW		Ground Water develpoment (STW)	1096	2252	1st,2nd & 3rd Year	616
		MOA & FW-DAC & FW		LLP	680	1360	1st,2nd & 3rd Year	250
6		MoWR		RRR of Water Bodies				
7		MoWR		Construction of field channels				
7.1		MoWR		Lined Field Channels				
7.2		MoWR		Unlined Field Channels				
8		MoWR		Micro-Irrigation				
9		MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
10		MOA & FW-DAC & FW		DPAP Sprinkler				
11		MOA & FW-DAC & FW		Non- DPAP Drip	12	12	1st & 2nd Year	43
12		MOA & FW-DAC & FW		Non- DPAP Sprinkler	36	36	1st & 2nd Year	13
13		MOA & FW-DAC & FW	Per drop more crop (Supplementary water	Topping up of MGNREGA				

			management activities)					
		MOA & FW-DAC & FW		Pond	86	172	1st,2nd & 3rd Year	430
14		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures				
15		MOA & FW-DAC & FW		Secondary Storage Structure				
16		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				

10) Name of Block: Kamalpur

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY								
S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1		MoWR	AIBP	Major Irrigation				
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation				
4		MoWR	HAR Khet Ko Pani	ELIS	29	1187		2359.5
5		MoWR		Ground Water develpoment (DTW)	75	2856.2		5740.7
		MOA & FW-DAC &		Ground Water	281	562		140.5

		FW		develpoment (STW)				
		MOA & FW-DAC & FW		LLP	175	70		350
6		MoWR		RRR of Water Bodies	6	421		842
7		MoWR		Construction of field channels				
7.1		MoWR		Lined Field Channels				
7.2		MoWR		Unlined Field Channels				
8		MoWR		Micro-Irrigation				
9		MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
10		MOA & FW-DAC & FW		DPAP Sprinkler				
11		MOA & FW-DAC & FW		Non- DPAP Drip				
12		MOA & FW-DAC & FW		Non- DPAP Sprinkler				
13		MOA & FW-DAC & FW	Per drop more crop (Supplementary water management activities)	Topping up of MGNREGA				
14		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures				
15		MOA & FW-DAC & FW		Secondary Storage Structure				
16		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				

11) Name of Block: Rampur

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY								
S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1	Rampur	MoWR	AIBP	Major Irrigation				
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation				
4		MoWR	HAR Khet Ko Pani	Lift Irrigation				
5		MoWR		Ground Water develpoment (DTW)	70	2100	1st,2nd,3rd,4th & 5th Year	4620
5		MOA & FW-DAC & FW		Ground Water develpoment (STW)	2271	4591.5	1st,2nd,3rd & 4th Year	1135.5
6		MoWR		RRR of Water Bodies				
7		MoWR		Construction of field channels				
7.1		MoWR		Lined Field Channels				
7.2		MoWR		Unlined Field Channels				
8		MoWR		Micro-Irrigation				
9	Rampur	MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
10		MOA & FW-DAC & FW		DPAP Sprinkler				
11		MOA & FW-DAC & FW		Non- DPAP Drip				
12		MOA & FW-DAC & FW		Non- DPAP Sprinkler	15	75		11.1
13	Rampur	MOA & FW-DAC & FW	Per drop more crop (Supplementary water management activities)	Topping up of MGNREGA				

14		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures				
		MOA & FW-DAC & FW		Pond	14	28		28
15		MOA & FW-DAC & FW		Secondary Storage Structure				
16		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				

Proposed List of Activity for PMKSY(Watershed Development) Under Soil Conservation Department, Kamrup District								
Sl. No.	***Name of the Blocks/Sub Districts***	***Concerned Ministry/ Department***	***Component***	***Activity to be done (already included in DPR)***	***Total Number/ Capacity (cum)***	***Command Area/Irrigation Potential (Ha)***	***Period of Implementation (5/7yrs)***	***Estimated cost (Rs. in Lakh.)***
1	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***
3				Earthen Embankment at Tezpur	-	7.1	**2016-17**	3.56
4				Farm Pond at Tezpur village	4124	11.5	-Do-	5.77
5				Farm Pond at Satpokhali village	1998	5.6	-Do-	2.80
6				Earthen Embankment at satpokhali village		9.1	-Do-	4.53
7				Development of Farm Pond at Tezpur	5094	14.3	-Do-	7.13
8				RCC Check Dam at Satpokholi	6357	6.2	-Do-	5.59

9				Water Harvesting Pond at Bortezpur village	21428	60.0	**2017-18**	30.00
10				RCC Check Dam (Kalahijan) Satpakhali village	18750	16.7	-Do-	15.00
11				Drainage Channel t Satpakhali village	20000	36.0	-Do-	18.00
12	**Rampur**	**DoLR**	**PMKSY (watershed Development) IWMP**	RCC Check Dam (Naqapara Jan) Satpokhali village	25000	22.2	-Do-	20.00
13				Swampy Land Dev. (Solbeel) at Satpokhali village	14286	40.0	-Do-	20.00
14				Drainage Channel at Jiakur village	16666	30.0	**2018-19**	15.00
15				Earthen Bund at panikhaiti village	12500	20.0	-Do-	10.00
16				Drainage Channel at Panikhaiti village	11112	20.0	-Do-	10.00
17				Drainage Channel at Bortari village	11112	20.0	-Do-	10.00
Total						**318.7**		**177.39**

12) Name of Block: Rangia

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY								
S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1		MoWR	AIBP	Major Irrigation				
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation				
4		MoWR	HAR Khet Ko Pani	Lift Irrigation				
5		MoWR		Ground Water develpoment (DTW)	809	1618	5	404.5
5		MOA & FW-DAC & FW		Ground Water develpoment (STW)	804	1608	5	402
5		MOA & FW-DAC & FW		LLP	130	260	5	52
6		MoWR		RRR of Water Bodies				
7		MoWR		Construction of field channels				
7.1		MoWR		Lined Field Channels				
7.2		MoWR		Unlined Field Channels				
8		MoWR		Micro-Irrigation				
9		MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
10		MOA & FW-DAC & FW		DPAP Sprinkler				
11		MOA & FW-DAC & FW		Non- DPAP Drip				
12		MOA & FW-DAC & FW		Non- DPAP Sprinkler				
13		MOA & FW-DAC & FW	Per drop more crop (Supplementary water management activities)	Topping up of MGNREGA				

14		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures				
15		MOA & FW-DAC & FW		Secondary Storage Structure				
16		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				

Chapter 5. Strategic Action Plan for Irrigation in District Kamrup (R)Under PMKSY									Remarks
Sl. No.	**Name of the Blocks/ Sub Division**	**Concerned Ministry / Department**	**Component**	**Activity**	**Total Number/ Capacity (Cum)**	**Command Area/Irrigation Potential (Ha)**	**Period of Implemantation (5/7 Years)**	**Estimated cost (in lakhs)**	
	Rangia Development Block		**PMKSY Watershed**	**Newly created WHS**					The activities that are listed in the prescribed format being included as per the approved DPRs of IWMP from DoLR, MoRD, GOI and as per PMKSY Guide Lines.
1		DoLR - MoRD		LDP (Agri Field Bundh)	38/57584 m³	571.60	1st,2nd,3rd,4th and 5th yr	68.530	
2		DoLR - MoRD		RCC Check Dam	3/118343m³	167.00	1st,2nd,3rd,4th and 5th yr	20.016	
3		DoLR - MoRD		Farm Pond/ Fishery	32/44897 m³	583.80	1st,2nd,3rd,4th and 5th yr	72.290	
4		DoLR - MoRD		Drainage Channel	19 / 30723 m³	419.00	1st,2nd,3rd,4th and 5th yr	50.700	
				Renovated WHS					
		DoLR - MoRD		Farm Pond/ Fishery					

13) Name of Block: Rani

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY

S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1		MoWR	AIBP	Major Irrigation				
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation	5	2150	5	3295
4		MoWR	HAR Khet Ko Pani	Lift Irrigation				
5		MoWR		Ground Water develpoment (DTW)	13	390	5	780
5		MOA & FW-DAC & FW		Ground Water develpoment (STW)	967	390	5	483.5
		MOA & FW-DAC & FW		LLP	257	514		102.8
6		MoWR		RRR of Water Bodies				
7		MoWR		Construction of field channels				
7.1		MoWR		Lined Field Channels				
7.2		MoWR		Unlined Field Channels				

8		MoWR		Micro-Irrigation				
9		MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
10		MOA & FW-DAC & FW		DPAP Sprinkler				
11		MOA & FW-DAC & FW		Non- DPAP Drip				
12		MOA & FW-DAC & FW		Non- DPAP Sprinkler				
13		MOA & FW-DAC & FW	Per drop more crop (Supplementary water management activities)	Topping up of MGNREGA				
14		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures				
15		MOA & FW-DAC & FW		Secondary				
				Storage				
				Structure				

16		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				

Proposed List of Activity for PMKSY(Watershed Development)Under Soil Conservation Department,Kamrup District								
Sl. No.	***Name of the Blocks/Sub Districts***	***Concerned Ministry/ Department***	***Component***	***Activity to be done in PMKSY***	***Total Number/ Capacity (cum)***	***Command Area/Irrigation Potential (Ha)***	***Period of Implementation (5/7yrs)***	***Estimated cost (Rs. in Lakh.)***
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	**RANI**	**DoLR**	**PMKSY (watershed Development) ,IWMP**	Drainage Channel at Challi Village	1250	2.3	**2016-17**	1.13
2				Farm Pond at Challi Village	1371	3.8	-Do-	1.92
3				Nulla Budh at Challi village	2706	4.9	-Do-	2.44
4				Eartehn Channel at at Challi Village	2105	3.8	-Do-	1.89
5				Farm Pond at Kocharialibari village	2057	5.8	-Do-	2.88
6				Reclamation of Maracy Land at Patgaon village	-	4.8	-Do-	2.40
7				Nulla Bund at Patgaon	2666	4.8	-Do-	2.40
8				Earthen drainage Channel at Patgaon	2849	5.1	-Do-	2.56
9				Farm Pond at Sajanpara village	1050	2.9	-Do-	1.47
10				Farm Pond Sajanpara village	2057	5.8	-Do-	2.88
11				Nulla Bund at Sajanpara village	3467	6.2	-Do-	3.12
12	**RANI**	**DoLR**	**PMKSY (watershed Development)**	Earthen drainage channel at Sajanpara village	3860	6.9	-Do-	3.47

13				Reclamation of Maracy Land at kallapara village	2014	5.6	-Do-	2.82
14				Earthen drainage Channel at Kallapara village	2295	4.1	-Do-	2.07
15				Nulla Bund at Kallapara village	3860	6.9	-Do-	3.47
16				Drainage Channel at Kallapara NC village	1447	2.6	-Do-	1.30
17				Reclamation of Maracy Land at kallapara NC	-	5.6	-Do-	2.78
18				Field Bund at kallapara NC	3013	5.4	-Do-	2.71
19				Earthen drainage Channel at kallapara NC	3253	5.9	-Do-	2.93
20				Reclamation of Maracy Land at Andhejuli	1681	4.7	-Do-	2.35
21				Field Bund at Andhejuli village	2287	4.1	-Do-	2.06
22				Earthen Channel at Andhejuli village	2267	4.1	-Do-	2.04
23				Farm Pond at Khenalialibari village	2057	5.8	-Do-	2.88
24				Field Bund at Khenalialibari village	2555	4.6	-Do-	2.30
25				Earthen Channel at Khenalialibari village	2590	4.7	-Do-	2.33
26	**RANI**	**DoLR**	**PMKSY (watershed Development) IWMP**	Farm Pond at Kocharialibari village	2057	5.8	-Do-	2.88
27				Earthen Channel at Kocharialibari village	3400	6.1	-Do-	3.06
28				Drainage Channel at Rangapara village	982	1.8	-Do-	0.88
29				Farm Pond at Rangapara village	2057	5.8	-Do-	2.88
30				Field Bund at Rangapara village	2711	4.9	-Do-	2.44
31				Earthen Channel at Rangapara village	2093	3.8	-Do-	1.88
32				Drainage Channel at Batabari Village	1325	2.4	-Do-	1.19
33				Farm Pond at Batabari village	1371	3.8	-Do-	1.92
34				Earthen Channel at Batabri village	2635	4.7	-Do-	2.37

35				Drainage Channel at Bahupara village	1203	2.2	-Do-	1.08
36				Farm Pond at Bahupara village	1371	3.8	-Do-	1.92
37				Earthen Channel at Bahupara village	3139	5.7	-Do-	2.83
38	RANI	DoLR	PMKSY (watershed Development) IWMP	Drainage channel at Kamragoan village	2130	3.8	-Do-	1.92
39				Farm Pond at Kamragoan village	1371	3.8	-Do-	1.92
40				Periphery Bund at Kamragoan village	2132	3.8	-Do-	1.92
41				Earthen channel at Kamragoan village	1632	2.9	-Do-	1.47
42				Drainage Channel at Nargaon village	907	1.6	-Do-	0.82
43				Drainage channel at Kamargoan village	2844	5.1	-Do-	2.56
44				Reclamation Of Marcy Land at Kamargoan	1829	5.1	-Do-	2.56
45				Farm Pond at Kamargaon village	1371	3.8	-Do-	1.92
46				Periphery Bund at Kamargaon village	2228	4.0	-Do-	2.01
47				Earthen Channel at Kamargaon village	3787	6.8	-Do-	3.41
48				Drainage Channel at Pathaldia village	1854	3.3	-Do-	1.67
49				Farm Pond at Pathaldia vilage	686	1.9	-Do-	0.96
50				Earthen Channel at Pathaldia vilalge	1472	2.6	-Do-	1.32
51				Earthen Bund at Nalgaon	1260	2.0	-Do-	1.01
52				Water Distribution channel at Sikarhati vill.	2230	4.0	-Do-	2.01
53	RANI	DoLR	PMKSY (watershed Development) IWMP	Earthen Bund (Rep.)at Garopara village	732	1.2	-Do-	0.59
54				Earthen Embankment at sanpara village	-	10.4	-Do-	5.22
55				Farm Pond at Sikharhati vilalge	4014	11.2	-Do-	5.62
56				Earthen Bund at Gauwa	2488	4.0	-Do-	1.99

				village				
57				Water distribution channel at Nalgaon	3136	5.6	-Do-	2.82
58				Farm Pond at Bahuwa village	1458	4.1	-Do-	2.04
59				Water Distribution channel at Bhalla vill.	3920	7.1	-Do-	3.53
60				Water Distribution channel at Bormokam vill.	2128	3.8	-Do-	1.92
61				Farm Pond at Berigaon village	1143	3.2	-Do-	1.60
62				Water distribution Channel at Kumarbori	3276	5.9	-Do-	2.95
63				Water distribution Channel at Garopara	1512	2.7	-Do-	1.36
64				Farm Pond at Sanpara village	1863	5.2	-Do-	2.61
65				Farm Pond at Sanpara village	3016	8.4	-Do-	4.22
66				Farm Pond at Sikarhati village	2007	5.6	-Do-	2.81
67				Water Distribution channel at Sikarhati	5055	9.1	-Do-	4.55
68				Water Distribution channel at Gatuwa	1106	2.0	-Do-	1.00
69	**RANI**	**DoLR**	**PMKSY (watershed Development) IWMP**	Earthen Bund at Gatuwa	2014	3.2	-Do-	1.61
70				Farm Pond at Nalgaon village	1008	2.8	-Do-	1.41
71				Earthen Bund at Nalgaon village	2856	4.6	-Do-	2.28
72				Water Distribution channel at Bahuwa	1134	2.0	-Do-	1.02
73				Water Distribution channel at Bahuwa	1836	3.3	-Do-	1.65
74				Water Distribution channel at Bhalla	1960	3.5	-Do-	1.76
75				Water Distribution channel at Bhalla	3173	5.7	-Do-	2.86
76				Water Distribution channel at Barmukam	1064	1.9	-Do-	0.96
77				Water Distribution channel at Barmukam	1723	3.1	-Do-	1.55
78				Water Distribution channel at Berigaon	933	1.7	-Do-	0.84
79				Farm Pond at Kumarbari village	1053	2.9	**2017-18**	1.47
80				Water Distribution channel at	2652	4.8	-Do-	2.39

				Kumarbori				
81				Water Distribution channel at Garopara	756	1.4	-Do-	0.68
82				Water Distribution channel at Berigaon	1224	2.2	-Do-	1.10
83				RCC Check Dam at Sikarhati Village	12550	20.2	-Do-	10.12
84				RCC Check Dam at Kuruwa Village	6975	14.0	-Do-	7.00
85				Drainage channel at Gutuwa Village	7944	14.3	-Do-	7.15
86				Water Harvesting Pond at Sanpara Village	10714	30.0	-Do-	15.00
87				Drainage channel at Andherijuli Village	27778	50.0	-Do-	25.00
88				Earthen Bund at Andherijuli	18750	30.0	-Do-	15.00
89				R.C.C. Check Dam at Sanpara	12500	12.2	-Do-	11.00
90				R.C.C. Check Dam at Sikarhati	12500	12.2	-Do-	11.00
91				Water Harvesting Pond at Sikarhati	18514	51.8	-Do-	25.92
92	**RANI**	**DoLR**	**PMKSY (watershed Development) IWMP**	R.C.C. Check Dam at Gotuwa Village	14947	14.6	-Do-	13.15
93				Water Harvesting Pond at Gotuwa Village	10028	28.1	-Do-	14.04
94				Earthen Channel at Gotuwa Village	11722	21.1	-Do-	10.55
95				Earthen Channel at Gotuwa Village (Dhopguri)	7833	14.1	-Do-	7.05
96				Water Harvesting Pond at Kuruwa Village	5821	16.3	-Do-	8.15
97				Drainage Channel at Kuruwa Village	8333	15.0	-Do-	7.50
98				Drainage Channel (Brick) at Kuruwa Village	362	18.1	-Do-	9.05
99				R.C.C. Check Dam at Nalgaon, Sikarhati (5 Nos.)	74739	73.1	-Do-	65.77
100	**RANI**	**DoLR**	**PMKSY (watershed Development) IWMP**	Boulder Pitching at Nalgaon, Sikarhati	-	40.0	-Do-	20.00
101				Water Harvesting Pond at Bohuwa Village	8264	23.1	**2018-19**	11.57

102				R.C.C. Check Dam at Bohuwa	14947	14.6	-Do-	13.15
103				Earthen Channel at Bohuwa	7055	12.7	-Do-	6.35
104				Water Harvesting Pond at Bohuwa (2 Nos.)	4700	13.2	-Do-	6.58
105				R.C.C. Check Dam at Bhalla	6439	11.3	-Do-	5.67
106				R.C.C. Check Dam at Balahpur (2 Nos.)	17132	16.8	-Do-	15.08
107				Earthen Channel at Balahpur	5111	9.2	-Do-	4.60
108				Earthen Channel at Balahpur	3944	7.1	-Do-	3.55
109				Water Harvesting Pond at Balahpur (2 Nos.)	27843	78.0	-Do-	38.98
110				R.C.C. Check Dam at Berigaon (4 Nos.)	50000	48.9	-Do-	44.00
111				Earthen Channel at Berigaon	3167	5.7	-Do-	2.85
112				Earthen Channel at Berigaon	2778	5.0	-Do-	2.50
113				Earthen Channel at Berigaon	5889	10.6	-Do-	5.30
114				R.C.C. Check Dam at Kumarbori	8330	8.1	-Do-	7.33
115				Earthen Channel at Kumarbori (Brick)	10055	18.1	-Do-	9.05
116	**RANI**	**DoLR**	**PMKSY (watershed Development) IWMP**	Water Harvesting Pond at Kumarbori	18514	28.8	-Do-	25.92
117				R.C.C. Check Dam at Garopara	4545	4.4	-Do-	4.00
118				RCC Structure at (2Nos) Rangapara	10800	13.2	-Do-	11.90
119				Drainage Channel at Rangapara	7500	13.5	-Do-	6.75
120				Excavation of Drainage Channel at Amring	5000	9.0	-Do-	4.50
121				Farm Bunding at Tatiboma	10000	18.0	-Do-	9.00
122				Farm Bunding at Sarania	9000	16.2	-Do-	8.10
123				Horticulture Plantation at Umchur	-	1.0	-Do-	1.40
124				Excavation of Drainage Channel at Umchur	4000	7.2	-Do-	3.61
125				Horticulture Plantation at Mairapur	-	2.0	-Do-	2.80
126				Farm Bunding at Majpara	4000	6.4	-Do-	3.20
127				Horticulture Plantation at	-	0.9	-Do-	1.12

				Majpara				
128				Excavation of Drainage Channel at Kawasing Reserve	3000	5.4	-Do-	2.70
129				Farm Bunding at Garopara	11250	18.0	**2019-20**	9.00
130				Excavation of Drainage Channel at Challi	6000	10.8	-Do-	5.40
131				R.C.C. Box Culvert at Challi	-	1.4	-Do-	1.25
132	**RANI**	**DoLR**	**PMKSY (watershed Development) IWMP**	Farm Bunding at Joipur	6000	10.8	-Do-	5.40
133				Excavation of Drainage Channel at Kawasing Forest Village	4000	7.2	-Do-	3.60
134				Farm Bunding at Jarasal	6000	10.8	-Do-	5.40
135				Farm Bunding at Thengapara	6000	10.8	-Do-	5.40
136				Farm Bunding at Kenduri Gaon	12000	19.2	-Do-	9.60
137				Farm Bunding at Pazibindha	6000	10.8	-Do-	5.40
138				Excavation of Drainage Channel at Sarania	10000	18.0	-Do-	9.00
139				Farm Bunding at Kuruwa	12000	19.2	-Do-	9.60
140				Rubber Plantation at Tanganpara	-	4.3	-Do-	4.00
141				Farm Bunding at Patgaon	3000	4.8	-Do-	2.40
142				Farm Bunding at Moirapur Grant	3000	4.8	-Do-	2.40
143				Excavation of Farm pond at Parakuchi	4000	11.2	-Do-	5.60
144				Farm Bunding at Amring	12000	21.6	-Do-	10.80
145				Excavation of Drainage Channel at Tatiboma	10000	18.0	-Do-	9.00
146				Excavation of Farm Pond at Sarania	6000	16.8	-Do-	8.40
147				Excavation of Farm Pond at Umchur with Horticulture plantation.	5000	14.0	-Do-	7.00
148	**RANI**	**DoLR**	**PMKSY (watershed Development) IWMP**	RCC check dam at Umchur	7103	6.9	-Do-	6.25
149				Excavation of Farm Pond at Borprotima	6000	16.8	-Do-	8.40
150				Excavation of Drainage Channel at Mairapur	6000	10.8	-Do-	5.40
151				Excavation of Farm Pond at Majpara	6000	16.8	-Do-	8.40

152				Excavation of Farm Pond at Garopara	6000	16.8	-Do-	8.40
153				Excavation of Farm Pond at Challi	6000	16.8	-Do-	8.40
154				Excavation of Drainage Channel at Kenduri Gaon	10000	18.0	-Do-	9.00
155				R.C.C. drop spill way at Pazibindha	8523	8.3	-Do-	7.50
156				Excavation of Farm Pond at Kuruwa	4000	11.2	-Do-	5.60
157				Excavation of Farm Pond at Tanganpara	6000	16.8	-Do-	8.40
158				Excavation of Drainage Channel at Patgaon	9000	16.2	-Do-	8.10
159				Excavation of Drainage Channel at Moirapur Grant	6000	10.8	-Do-	5.40
160				Excavation of Drainage Channel at Khope Gaon	8000	14.4	-Do-	7.20
161				Excavation of Farm Pond at Tatiboma	4000	11.2	-Do-	5.60
162	**RANI**	**DoLR**	**PMKSY (watershed Development) IWMP**	Excavation of Farm Pond at Umchur with Horticulture plantation.	5000	14.0	-Do-	7.00
163				Water Harvesting Structure at Garopara	11364	11.1	-Do-	10.00
164				Farm pond at Challi	6000	16.8	**2020-21**	8.40
165				Excavation of Drainage Channel at Thengapara	6000	10.8	-Do-	5.40
166				Excavation of Drainage Channel at Tanganpara	6000	10.8	-Do-	5.40
167				Excavation of Farm Pond at Kenduri Goan	6000	16.8	-Do-	8.40
168				Excavation of Drainage Channel at Kuruwa	6000	10.8	-Do-	5.40
169				Excavation of Farm Pond at Patgaon	6000	16.8	-Do-	8.40
170				Excavation of Farm Pond at Khope Gaon	4000	11.2	-Do-	5.60
171				Water Harvesting Structure at Kurruwa	8523	8.3		7.50
172				Excavation of Drainage Channel at Joipur	6000	10.8	-Do-	5.40

173				Excavation of Drainage Channel at Garopara	10000	18.0	-Do-	9.00
174				Farm Bunding at Barpatima	16000	25.6	-Do-	12.80
175				Farm Bunding at Tanganpara	7500	12.0	-Do-	6.00
176	RANI	DoLR	PMKSY (watershed Development) IWMP	Farm Bunding at Khope Gaon	18000	28.8	-Do-	14.40
177				Excavation of Drainage Channel at Hatimura	6000	10.8	-Do-	5.40
178				Water Harvesting Structure at Kawasing Reserve	8523	15.0	-Do-	7.50
179				Excavation of Farm Pond at Jarasal	4000	11.2	-Do-	5.60
180				Farm Pond at Kawasing Reserve	5000	14.0	-Do-	7.00
181				Drainage Channel at Majikuchi village	1471	2.6	-Do-	1.32
182				Farm Pond Majikuchi village (3Nos)	2743	7.7	-Do-	3.84
183				Eartehn Channel at Majikuchi Viallge	2473	6.9	-Do-	3.46
184				Drainage Channel at Ratikanta Garden	1203	2.2	-Do-	1.08
185				Farm Pond at Ratikanta Garden	1371	3.8	-Do-	1.92
186				Earthen Channel at Ratikanta Garden	3139	5.7	-Do-	2.83
187				Farm Pond at Batapur village	424	1.2	-Do-	0.59
188				Farm Pond at Batapur village	1174	3.3	-Do-	1.64
189				Water Harvesting Pond at Dhupguri Village	5714	16.0	-Do-	8.00
190				Water Harvesting Pond at Dhupguri Village	5107	14.3	-Do-	7.15
191	RANI	DoLR	PMKSY (watershed Development) IWMP	Water Harvesting Pond at Fulguri Village	4286	12.0	-Do-	6.00
192				Water Harvesting Pond at Gorgara Village	5800	16.2	-Do-	8.12
193				Drainage channel at Pasenia Para Village	11111	20.0	-Do-	10.00
194				Reclamation of Maracy Land at Pasaniapara	1567	4.4	-Do-	2.19
195				Field Bunda Pasaniapara village	-	7.4	-Do-	3.70

196				Earthen Channel at Pasaniapara village	1925	3.5	-Do-	1.73
197				Drainage channel at Deurali village	1278	2.3	-Do-	1.15
198				Farm Pond at Deurali village (3no)	2057	5.8	-Do-	2.88
199				Field Bundat Deurali village	-	4.6	-Do-	2.30
200				Earthen Channel at Deurali village	2476	4.5	-Do-	2.23
201				Reclamation of Maracy Land at Jogipara village	947	2.7	-Do-	1.33
202				Farm Pond at Jogipara village	2057	5.8	-Do-	2.88
203				Earthen drainage Channel at Jogipara	4694	8.4	-Do-	4.22
204				Drainage Channel at Jobe village	1187	2.1	-Do-	1.07
205				Reclamation of Maracy Land at Jobe village	1681	4.7	-Do-	2.35
206				Nulla Bund at Jobe	2573	4.6	-Do-	2.32
207				Earthen drainage Channel at Jobe village	2485	4.5	-Do-	2.24
208	**RANI**	**DoLR**	**PMKSY (watershed Development) IWMP**	Reclamation of Maracy Land at Matikhutuni village	2185	6.1	-Do-	3.06
209				Field Bund at Matikhutuni village	3355	6.0	-Do-	3.02
210				Earthen drainage Channel at Matikhutuni village	3386	6.1	-Do-	3.05
211				Drainage channel at Deurali village	1278	2.3	-Do-	1.15
212				Reclamation of Maracy Land at Rajapanisanda	1972	5.5	-Do-	2.76
213				Nulla Bund at Rajapanisanda	2978	5.4	-Do-	2.68
214				Earthen drainage Channel at Rajapanisanda	3088	5.6	-Do-	2.78
215				Reclamation of Maracy Land at Jongalipara	1750	4.9	-Do-	2.45
216				Field Bund at Jongalipara	2720	4.9	-Do-	2.45
217				RCC Check Dam at Jongalipara	6669	12.0	-Do-	6.00
218				Periphery Bund at Jongalipara	2776	5.0	-Do-	2.50
219				Water Distribution channel at	924	1.7	-Do-	0.83

				Batapur				
220				Farm Pond at Batapur	962	2.7	-Do-	1.35
221				Drainage Channel at Malia RF Village	1242	2.2	-Do-	1.12
222				Nulla Budna at Malia village	3885	7.0	-Do-	3.50
223				Eartehn drainage Channel at at Malia RF	705	1.3	-Do-	0.63
Total						**2197.1**		**1216.99**

14) Name of Block: Sualkuchi

Chapter 5: Strategic Action Plan for Irrigation in District under PMSKY								
S. No.	Name of the blocks/ Sub district	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity (cum)	Command Area/ Irrigation Potential (Ha.)	Peroid of Implementation	Estimated Cost (in Lakh Rs.)
1		MoWR	AIBP	Major Irrigation				
2		MoWR		Medium Irrigation				
3		MoWR		Surface Minor Irrigation				
4		MoWR		Lift Irrigation	4	1480	5	1996.93
5		MoWR	HAR Khet Ko Pani	Lift Irrigation	1	75	4	150
6		MoWR		Ground Water develpoment (DTWS)	57	1241	7	2482
6		MOA & FW-DAC & FW		Ground Water develpoment (STW)	500	1000	7	2482
6		MOA & FW-DAC & FW		LLP	90	180	4	36.85
9		MOA & FW-DAC & FW		Community Pond	14	28	4	70
10		MoWR		RRR of Water Bodies				
11		MoWR		Construction of field channels				
11.1		MoWR		Lined Field Channels				
11.2		MoWR		Unlined Field Channels				
12		MoWR		Micro-Irrigation				
13		MOA & FW-DAC & FW	Per drop more crop (Micro Irrigation)	DPAP Drip				
14		MOA & FW-DAC & FW		DPAP Sprinkler				
15		MOA & FW-DAC & FW		Non- DPAP Drip	6	6	2	25.5
16		MOA & FW-DAC & FW		Non- DPAP Sprinkler	16	16	3	8.5
17		MOA & FW-DAC & FW	Per drop more crop (Supplementary water	Topping up of MGNREGA				

			management activities)					
18		MOA & FW-DAC & FW		Drought Proofing through Check Dams/ Water Harvesting Structures				
19		MOA & FW-DAC & FW		Secondary Storage Structure				
20		MOA & FW-DAC & FW		On Farm Development (distribution pipe / raised bed and furrow system etc.)				

Chapter 5. Strategic Action Plan for Irrigation in District Kamrup (R)Under PMKSY									Remarks
Sl. No.		**Concerned Ministry / Department**	**Component**	**Activity**	**Total Number/ Capacity (Cum)**	**Command Area/ Irrigation Potential (Ha)**	**Period of Implemantation (5/7 Years)**	**Estimated cost (in lakh)**	
	Sualkuchi Development Block		**PMKSY Watershed**	**Newly created WHS**					The activities that are listed in the prescribed format being included as per the approved DPRs of IWMP from DoLR, MoRD, GOI and as per PMKSY Guide
1		DoLR - MoRD		LDP (Agri Field Bund)	43/36648 m³	1016	1st,2nd,3rd, 4th & 5th yr	121.843	
3		DoLR - MoRD		Farm Ponds	5/33042 m³	173.40	1st,2nd,3rd, 4th & 5th yr	20.810	

6		DoLR - MoRD		Drainage Channel Cutting	5/10868 m³	149.40	1st,2nd,3rd, 4th & 5th yr	17.930	Lines.
7		DoLR - MoRD		Water Distribution Project	2/45 m³	112.60	1st,2nd,3rd, 4th & 5th yr	13.510	
				RTP (Boulder Pitching)	5/478 m³	221.00	1st,2nd,3rd, 4th & 5th yr	26.525	
9		DoLR - MoRD		Crop Demonstration	14/14.0 Hact.	2.182	1st,2nd,3rd, 4th & 5th yr	2.182	
				Renovated WHS					
10		DoLR - MoRD		Farm Pond/ Fishery	10/59230 m³	282.70	1st,2nd,3rd, 4th & 5th yr	33.932	