# **Activities Report** 2019-20







**ACTIVITIES REPORT** 

(Activities of 2019-2020 and Programme for 2020-2021)

**DEPARTMENT OF WATER RESOURCES** 

1

#### **ACTIVITIES REPORT**

(Activities of 2019-2020 and Programme for 2020-2021)

\* \* \* \* \* \* \* \* \*

The Department of Water Resources (DOWR) have been entrusted with the responsibility of planning, developing & managing the State's water resources. The major activities of the department are construction, operation & maintenance of irrigation projects, water conservation, ground water development, flood control & drainage improvement, command area development, water allocation for various uses, formulation of State Water Policy etc. The activities of the department are carried out through following sub-ordinate organizations/ Public Sector Undertakings.

- Major and Medium Irrigation
- Minor Irrigation (flow)
- Command Area Development & Water Management (CAD&WM)
- Ground Water Development (GWD)
- Odisha Lift Irrigation Corporation (OLIC)
- Water and Land Management Institute (WALMI)
- Odisha Construction Corporation Limited (OCCL)

#### **Budgetary Outlay**

For implementation of various activities of the Department, provision of funds is made in the budget under two sub-heads i.e Programme Expenditure and Administrative Expenditure. Funds allocated under Programme Expenditure are utilised for construction and modernization of irrigation projects, water conservation, ground water development, construction including raising and strengthening of flood protection embankments, drainage improvement and command area development etc. Similarly, funds allocated under Administrative Expenditure are utilized for meeting the establishment expenditure, operation and maintenance of created infrastructures such as irrigation projects, flood control embankments, drainage channels and grants to PSUs & Pani Panchayats. A comparative picture on sector-wise allocation of funds of the department for the financial year 2019-20 & 2020-21 is given in the following table.

 Department	of	Water	Resources	

Table-1 Sector-wise allocation of funds (₹ in Cr.)

Sector	FY: 2019-20			FY: 2020-21			
	Administrative Expdr.	Programme Expdr.	Total	Administrative Expdr.	Programme Expdr.	Total	
Major & Medium	731.62	4008.39	4740.01	736.37	4310.23	5046.60	
Mega Lift	-	1776.67	1776.67	-	540.00	540.00	
Minor (Flow)	242.54	813.00	1055.54	250.33	931.05	1181.38	
Minor Lift	19.27	517.00	536.27	19.27	910.00	929.27	
GWD	16.35	50.00	66.35	17.75	40.00	57.75	
Flood Control & Drainage	178.49	968.00	1146.49	180.17	1060.00	1240.17	
CAD&WM	17.88	313.76	331.64	16.86	300.00	316.86	
Others	60.46	-	60.46	62.43	0.00	62.43	
Total	1266.61	8446.82	9713.43	1283.18	8091.28	9374.46	

#### "Mo Sarkar":

The department has rolled out "Mo Sarkar" on 2<sup>nd</sup> March 2020. Officers and staff have been sensitized through video conferencing & training to bring in professionalism and behavioural changes to deal with the stake holders/ citizens in order to make the programme successful.

#### **5T Charter of DOWR:**

With an aim to ensure better service delivery to public, department has identified following goals basing on 5T mantra of Government .

- Providing advance information to farmers on water availability in the project through digital platform in collaboration with ADAPT (Analytic for Decision making & Agriculture Policy Transformation) for planning their crops. Work in progress.
- Development of mobile based app for farmers for submission of grievances and its redressal. Work in progress.
- Development of web portal for Land acquisition, Rehabilitation & Resettlement details. Work in progress.
- Online payment wages to construction labourers.
- E-Billing and zero tolerance towards delay in bill payment, e-MB and Nil Billing to be made mandatory.

	Government of Odisha
,	(-organization of Claicha



- Development of Real time flood forecasting system in collaboration with CWC.
- Development of online tracking system for water allocation to commercial and other establishments
- Time bound water allocation to Industrial and other Commercial establishments.
- Use of latest Enterprise Resource Planning (ERP) solutions for effective monitoring.
- Use of latest technology for ground water mapping, water conservation and bringing in International knowledge Partners.
- All payments in Integrated Financial Management System (IFMS) and Direct Benefit Transfer (DBT) mode.
- Policy for recognizing best and outstanding performers. Exposure visits promptly sorting out of employee issues.
- Third party evaluation on quality.
- Identification of Iconic projects and its monitoring to bring about transformation.
- Focus on farmer centric Bore-well and Community Lift Irrigation Points.
- Development of "In-Stream Storage Structures" & consolidation of Mega Lift
   Irrigation projects

#### **Highlights of Budget 2020-21**

- Construction of In-stream Storage Structure: With a view to deal with the problems faced due to climate change, DOWR have formulated one new scheme "Construction of In-stream Storage Structures" with an estimated outlay of ₹11700.00 crore for conservation of surface water resources in a large scale inside the rivers. This will cater to meet the growing demands of water on different sectors. Budgetary allocation of ₹1092.00 crore has been proposed during 2020-21 for this scheme.
- Irrigation Development: Additional irrigation potential of approximately 1.84 lakh hectares is proposed to be created through various sources (Major & Medium Irr.-0.35 lakh hectares, Minor flow Irr-0.04 lakh hectares, Mega Lift Irrigation-0.45 lakh hectares, Bore wells & Community LIPs 1.00 lakh hectares)
- Parvati Giri Mega Lift Irrigation: 33 ongoing mega lift projects are to be completed. Budgetary outlay of ₹540.00 crore has been proposed under this scheme.



4

- Deep Bore Well Secha Karyakrama: 15,000 Deep Bore Wells are to installed and handed over to beneficiaries. Budgetary outlay of ₹350.00 crore has been proposed under this scheme.
- PMKSY- (Har-Khet-Ko-Pani): One proposal has been submitted to Ministry of Jal Shakti to harness ground water resources through construction of Bore Wells, Shallow Tube Wells etc. Budgetary outlay of ₹301.05 crore has been proposed under this programme.
- **Biju Krushak Vikash Yojana**: 1,250 Community Lift Irrigation Project are to be installed and handed over to Pani Panchayats. Budgetary outlay of ₹360.00 crore has been proposed under this programme.
- **Revival of Defunct LIPs:** 1200 defunct LIPs are to be repaired. Budgetary outlay of ₹190.84 crore has been proposed under the programme "Revival of Defunt LIPs".
- Budgetary outlay of ₹250.00 crore made for execution of Gangadhar Meher Lift Canal system.
- Major & Medium Irrigation: Budgetary outlay of ₹360.00 crore for Subarnarekha Project, ₹260.00 crore of Anandapur Barrage Project, ₹210.00 crore for Kanpur Project, ₹90.00 crore for Lower Indra Project, ₹250.00 crore for Rengali Right Canal, ₹108.00 crore for Lower Suktel Project, ₹110.00 crore for Deo Project has been made.
- Mukshyamantri Adibandha Tiari Yojana: Budgetary outlay of ₹67.00 crore (Maj & Med-₹30.00 cr, Minor Irr-₹37.00 cr) has been proposed under this programme to complete the ongoing Check Dams.
- Renovation of Panchayat Tanks in KBK Districts: DOWR to renovate the large tanks of PR&DW Department in KBK districts to augment their storage capacity. PR&DW department will identify the tanks for renovation in-consultation with MI organization of DOWR. The ownership & maintenance will remain with PR&DW department. Budgetary outlay of ₹130.00 crore has been made for implementation of the scheme.
- Budgetary outlay of ₹90.40 crore has been made for implementation of Nabakrushna Choudhury Secha Unayana Yojana for modernization and improvement of major, medium and minor irrigation projects.

. Government of Odisha 📖	_



- Canal Lining & System Rehabilitation Programme (CLSRP): Budgetary outlay of ₹190.00 crore (Major & Medium ₹130.00 crore, M.I. Sector-₹60.00 crore) has been made under CLSRP with a target to complete approximately 100km of lining of canals.
- Drainage Improvement Programme (DIP): For improvement of drainage systems both in rural and urban areas, budgetary outlay of ₹257.77 crore (Major & Medium- ₹247.77 crore, M.I. Sector- ₹10.00 crore) has been made under this scheme. Target has been set to retrieve waterlogged area of approximately 16938 hectares.
- **Flood Control:** Budgetary outlay of ₹760.00 crore (RIDF ₹450.00 crore, State Plan ₹310.00 crore) has been made for flood protection and river training works. Target has been set to protect agriculture land of approximately 2.15 lakh hectares.
- Command Area Development: Budgetary outlay of ₹300.00 crore made under this programme with a target to construct field channel covering approximately 77413 hectares.
- Dam Rehabilitation & Improvement Programme (DRIP): Budgetary outlay of ₹125.00 crore has been made for rehabilitation works of 07 dams including construction of additional Spillway at Hirakud.
- Rengali Left Bank Canal funded by JICA: Budgetary outlay of ₹324.16 crore made for implementation of Rengali Left Bank Canal (RD. 71.31 Km to RD. 123.50 Km).
- Odisha Integrated Irrigation Project for Climate Resilient Agriculture (OIIPCRA):
   Budgetary outlay of ₹150.00 crore has been made for renovation of Minor Irrigation
   Projects through World Bank.
- Roof Top Rain Water Harvesting in 27 Urban Local Bodies & 49 water stressed Blocks: Budgetary outlay of ₹37.00 crore has been made under this scheme with a target to construct rooftop rainwater harvesting structures in 6000 private buildings and 300 government buildings.

#### Achievements during 2019-20 (Status as of January 2020)

• Creation of Additional Irrigation Potential: Additional irrigation potential of approximately 63965 hectares has been created during 2019-20 up to end of January 2020 through different sources (major & medium irrigation– 9451 hectares, minor (flow) irrigation-4196 hectares, mega lift irrigation-11664 hectares, minor lift irrigation including borewells- 38654 hectares).

Department	of	Water	Resources
 CPGALUALCALU	~	11 000	1000000



- Parvati Giri Mega Lift Irrigation: 12 Mega Lift irrigation projects have been completed.
- **Deep Bore Well Secha Karyakrama:** 3372 Deep Bore Wells have been installed and handed over to the beneficiaries.
- **Revival of Defunct Lift Irrigation Projects:** 376 defunct LIPs have been repaired and irrigation potential of approximately 7585 hectares has been revived.
- Community LIPs under BKVY: 796 Community LIPs to provide irrigation to approximately 17750hectares have been installed and handed over to Pani Panchayats.
- Mukshyamantri Adibandha Tiari Yojana: 343 Check dams have been completed.
- Flood Control: 64 flood protection projects have been completed under RIDF scheme and approxmately 4.25 lakh hectares of agricultural land have been protected from flood. 71 new flood control project with an estimated cost of ₹419.99 crore has been sanctioned by NABARD to protect agriculture land of approximately 1.58 lakh hectares.
- **Drainage Improvement Programme:** Approximately 599 km of drainage channels have been renovated/improved and approximately 9262 hectares of waterlogged land have been retrieved up to end of January 2020.
- **Command Area Development:** Field channels covering an area of approximately 4902 hectares have been constructed.
- Canal Lining & System Rehabilitation Programme: Lining of canals for a length of approximately 62.48 km in major and medium irrigation projects and lining of canals for a length of approximately 0.85 km in minor irrigation projects have been completed.

#### **ACTIVITIES**

Odisha is one of the leading states in the country in terms of investment on water resources development. With a view to deal with the problems faced due to climate change, Department is giving special emphasis on water conservation, ground water recharge and improving water use efficiency of irrigation projects. In addition to the above, Department have launched many short gestation schemes for accelerating irrigation development. During the financial year 2020-21, it is programmed to create additional irrigation potential of 1.84 lakh hectares through different sources. The status of various schemes and programme implemented by the department are as follows.

6	Government of	Odis	ha
_		<u> </u>	



#### A. Major & Medium Irrigation

Major & Medium irrigation projects are executed mainly through centrally sponsored Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), state funded Water Sector Infrastructure Development Programme (WSIDP) and Japan International Co-operation Agency (JICA). In addition to this Dam Rehabilitation & Improvement Project (DRIP) funded by World Bank is being implemented for rehabilitation of distressed dams. Besides, Canal Lining & System Rehabilitation & Nabakrushna Choudhury Secha Unayana Yojana etc. are under implementation for modernization of old irrigation projects and their canal systems. Apart from irrigation development, for large scale conservation of surface water inside the rivers/ streams, one new scheme namely Construction of "In-stream Storage Structure" have been proposed during current financial year. Schemes wise details are enumerated below.

#### 1. Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

PMKSY has been started during 2015-16. Eight (08) major & medium irrigation projects namely Upper Indravati Extension, Subarnarekha, Lower Indra, Integrated Anandapur Barrage, Kanupur, Telengiri, Ret & Rukura have been included under PMKSY. Out of eight projects, 04 Projects namely Ret, Rukura, Upper Indravati Extension, Telengiri have been completed. Besides in other two projects namely Anandapur & Lower Indra, head works have been completed and at present distribution system works are in progress. Remaining two projects namely Subarnarekha & Kanupur are under progress. The physical and financial status of PMKSY projects are given in the following table.

Table - 2 PMKSY-Projects (Status as of January - 2020)

Project Name	Financial (₹ in Crore )			CCA (th.ha.)		Remarks
	Latest Cost	Expdr. upto January 2020	Budget during 2020-21	Design	Created by 01/2020	
A. AIBP Works						
Indravati Ext.	627.96	638.18	0.00	25.48	25.48	Completed
Subarnarekha	4764.28	4488.30	347.93	67.40	50.73	Progress
Lower Indra*	1753.64	1788.32	70.71	29.90	23.20	Progress
Anandapur	2990.05	1480.77	251.00	60.00	0.00	Progress
Kanupur	2438.29	1758.21	209.71	29.58	0.00	Progress



Project Name	Financial (₹ in Crore)			CCA	(th.ha.)	Remarks
	Latest Cost	Expdr. upto January 2020	Budget during 2020-21	Design	Created by 01/2020	
Telengiri*	992.85	1141.16	32.00	9.95	8.85	Completed
Ret	768.46	748.39	16.20	8.50	8.50	Completed
Rukura	296.98	285.89	4.95	5.75	5.11	Completed
Sub Total	14632.51	12329.21	932.50	236.56	121.87	
B. CAD&WM Works						
Indravati Ext.	140.27	140.22	0.00	25.48	25.48	Completed
Subarnarekha	389.58	36.14	12.07	69.80	4.69	Progress
Lower Indra	103.08	62.94	19.29	29.90	14.02	Progress
Anandapur	334.37	5.87	9.00	60.00	2.21	Progress
Kanupur	164.85	2.73	0.29	29.58	0.00	Progress
Telengiri	54.51	35.59	0.00	9.95	6.00	Progress
Ret	46.87	40.13	3.80	8.50	8.50	Completed
Rukura	31.71	20.56	0.05	5.75	5.65	Completed
Sub Total	1265.23	344.18	44.50	238.96	66.55	
G.Total	15897.74	12673.39	977.00	475.52	188.42	

During current financial year (2019-20), Ministry of Jal Shakti has asked states for submission of eligible project proposal for inclusion under PMKSY-AIBP. Accordingly, DOWR has submitted proposal of the ongoing WSIDP projects namely Rengali Right Bank Canal, Lower Suktel, Chheligada, Deo, Kusumi, Gangadhar Meher Lift & pipeline projects namely; Sono, Sandul, Jeera, Ranjore, Turi-Guntat, Upper Lanth, Bankatira, Hidsing, Rengali Left Bank Canal (Balance work) for consideration of its inclusion under PMKSY.

#### 2. Water Sector Infrastructure Development Programme (WSIDP)

This scheme has been started during 2014-15 with an objective to take up new major and medium irrigation projects and to expedite completion of last mile untied ongoing irrigation projects viz. Hadua, Manjore, Baghalati, Mahendratanaya, Deo, Lower Suktel, Chheligada, MCII, Rajua & Ghatakeswar etc. Beside survey & investigation work, statutory clearance work such as forest and environment clearance, TAC clearance, R&R clearance etc. of pipeline projects are also taken up under this scheme. The physical and financial status of WSIDP projects are given in the following table.

Ω	,	C	ماداه
0		Government of	Odisha —

Table - 3
Status of WSIDP (as of January - 2020)

Project Name	Fin	ancial (₹ in Croi	re )	CCA (	th.ha.)
	Latest Cost	Expdr. upto January 2020	Budget during 2020-21	Design	Created by 01/2020
Rengali Right Canal	1962.33	2212.66	250.00	84.41	18.29
Lower Suktel	2448.09	1505.10	108.00	31.83	0.00
Chheligada	708.06	245.34	30.00	3.80	0.00
Deo	941.40	622.62	110.00	9.90	0.00
Manjore	417.56	411.69	8.00	6.78	5.71
Mahendratanaya	203.89	33.94	10.00	3.04	0.00
Hadua	323.38	65.50	6.00	3.95	0.00
Baghalati	262.49	207.50	8.00	6.22	6.00
MCII	163.50	97.01	52.23	5.93	0.00
Rajua	35.27	21.36	5.00	2.67	0.82
Ghatakeswar	118.95	44.44	20.00	0.50	0.00
Ong Extension	221.34	30.98	18.00	13.51	0.00
Sub Total	5503.64	3210.06	337.23	74.12	12.53

#### 3. Gangadhar Meher Lift Canal System

The project has been taken up with an objective to provide irrigation facilities to 25,600 hectares of agricultural land in Bijepur, Sohela and Barpali blocks of Bargarh district. It is proposed to adopt micro irrigation in 30% of the project command area. The latest estimated cost of the project is ₹1340.55 crore. Tender has been invited to take up the work through EPC mode. Budgetary allocation of ₹250.00 crore has been proposed under PMKSY during 2020-21 for this project.

#### 4. Externally Aided Projects

#### (i) Rengali Left Bank Canal (RD.71.313 km to RD.123.50 km)

Rengali Left Bank Canal is 141 Km long and designed to provide irrigation to 1,14,300 hectare in Angul, Dhenkanal & Jajpur districts. Out of which, canal system from RD 0.00 km to RD 71.313 km has been completed through World Bank & JICA funding in phased manner and additional irrigation potential of approximately 37.07 thousand hectares have been created.

At present, Left Bank Canal work from RD 71.31 km to 123.50 km is in progress through JICA funding to provide irrigation to 39416 hectares in Dhenkanal and Jajpur districts. The estimated cost of the project is 42850 million Japanese Yen (₹2255.30 crore approximately). Out of which, JICA will provide loan amounting to 33959 million Japanese Yen (₹1787.20 crore approximately). The project will be completed during 2022-23. An amount of ₹543.05 crore has been spent under this programme upto end of January-2020 and additional irrigation potential of approximately 2405 hectares have been created. A sum of ₹324.16 crore has been allocated in the budget during 2020-21 for this project with a target to provide irrigation to approximately 5500 hectares .

#### (ii) Dam Rehabilitation and Improvement Project (DRIP)

Dam Rehabilitation & Improvement Project (DRIP) is being implemented at national level through World Bank assistance for rehabilitation of distressed dams and to improve the safety and operational performance of dams. Odisha is one of the participating states. 26 dams viz. Hirakud, Balimela, Rengali, Salandi, Upper Kolab, Daha, Derjang, Dhanei, Kalo, Nesa, Pilasalki, Pitamahal, Salia, Sarafgarh, Satiguda(UKP), Satiguda (Malkangiri), Talasara, Asoka Nalla, Balaskumpa, Banksal, Jhumuka, Damsal, Sapua, Bhaskel, Sunder & Sanamachakandana have been taken up under this programme with an estimated cost of ₹147.76 crore. Subsequently the cost of the project has been revised to ₹751.19 crore with inclusion of additional spillway of Hirakud Dam. Out of 26 dams, rehabilitation work of 19 nos. of dams namely Bhaskel, Dhanei, Daha, Kalo, Nesa, Pilasalki, Pitamahal, Salandi, Salia, Sarafgarh, Rengali, Satiguda (UKP), Sunder, Talasara, Ashok Nalla, Jhumuka, Damsal, Bankasal and Balaskumpa have been completed. Budgetary outlay of ₹125.00 crore has been made during 2020-21 under this scheme with a target to complete rehabilitation work of 07 Dams including construction of additional spillway of Hirakud Dam.

#### 5. Rural Infrastructure Development Fund (RIDF):

The RIDF scheme has been launched by NABARD in 1995 with the objective to provide financial assistance for development of rural infrastructure. 155 projects under major & medium irrigation sector have been taken up under RIDF-I to RIDF-XXV to create additional irrigation potential of approxmately 123.82 thousand hectares and to stabilize approximately 166.90 thousand hectares. By end of January-2020, 126 projects have been completed and additional irrigation potential of approximately 81.84 thousand hectares has been created and



approximately 141.357 thousand hectares of irrigation potential has been stabilised. Tranche wise status of projects executed under RIDF is given in the table below

Table - 4
RIDF assisted Major & Medium irrigation projects (as of January 2020)

Tranche	No(s)		Design Potential in	Potential Created	
	Taken up	Completed	(New/Stabilisation)	(New/ Stabilisation)	
			(Th. Ha)	(Th. Ha)	
RIDF-I to XIV	89	71	109.628/63.951(s)	81.841/55.405(s)	
RIDF-XVIII	12	11	6.50/25.988(s)	25.988 (s)	
RIDF-XIX	15	15	18.309(s)	18.309 (s)	
RIDF-XX	19	18	5.40/26.579 (s)	25.379(s)	
RIDF-XXI	3	3	5.425 (s)	5.425(S)	
RIDF-XXII	12	8	19.646 (s)	10.851(S)	
RIDF-XXIV	3	0	2.295/0.949(S)	-	
RIDF-XXV	2	0	0/6.053(S)	-	
Total	155	126	123.823/166.900(s)	81.841/141.357(s)	

<sup>&#</sup>x27;S' means Statbilisation

During 2020-21, a sum of ₹5.90 crore has been allocated in the budget with a target to stabilize irrigation potential of approxmately 10.00 thousand hectares.

#### 6. Canal Lining & System Rehabilitation Programme(CLSRP)

This programme was taken up during 2013-14 from State's own resources. The objectives of the programme are to increase water use efficiency of canal system and to enhance water availability at tail end command areas of major, medium and minor irrigation projects. Canal systems of 12 major & medium irrigation projects namely Jajpur canal system, Kanas branch canal system, Kendrapada canal system (RD 0 to 11.98 km), Anandapur Main Canal system, Gompakunda main canal, Tamasa canal system, Parjang branch canal system, Astaranga minor, Indravati right canal system and canal systems of Talasara, Pitamahal & Sarafgarh medium irrigation projects have been included under this scheme. The estimated cost of these projects is ₹805.53 crore . Out of the above, eight (8) projects namely Talasara, Pitamahal, Sarafgarh, Kanas Branch Canal, Kendrapada Canal, Astaranga Minor, Gompakunda Canal, Tamasha Canal have been completed, Three (3) projects are in progress and work in Upper Indravati Right canal system has not been taken up. By end of January-2020, an amount of ₹542.60 crore has been spent and lining of canals for a length of 406.83 Km. have been completed. Projectwise physical and financial status are given in the following table.

Table-5
Status of CLSRP (As of January 2020)

S1. No	Name of the Project	Administrative Approval	Expdr. incurred upto		hysical ing in Km)
		Cost (₹ in Cr.)	January-2020 (₹ in Cr.)	Target	Achievement
1	Talsara	24.28	24.47	43.71	43.06
2	Pitamahal	11.54	11.20	24.11	24.11
3	Sarafgarh	13.38	12.78	33.45	31.06
4	Jajpur Canal system	72.97	90.87	40.93	36.06
5	Kanas Br. Canal system (Delta-II Irr. Project)	82.87	87.76	40.44	40.44
6	Kendrapara Canal System (Delta-I Irr. Project)	53.06	67.90	28.75	28.70
7	Astaranga Minor (Delta-II Irr. Project)	8.99	9.79	1.95	1.95
8	Anandpur Canal system (Anandapur Irr. Project)	68.81	68.16	57.50	47.64
9	Gompakunda Canal system (Potteru Irr. Project)	44.68	67.15	16.57	16.57
10	Tamasa Canal system (Potteru Irr. Project)	30.72	40.51	21.44	21.51
11	Parjang Canal system (Rengali Irrigation Project)	71.49	61.85	142.10	115.74
12	Right Main Canal system ( Upper Indravati Project)	322.74	0.17	83.71	0.00
	Total	805.53	542.60	534.66	406.83

In addition to the above, 46 minor irrigation projects with an estimated cost of ₹214.15 crore have been included under this Programme and work has been completed for 46 projects. An amount of ₹196.80 crore has been spent and lining for 391.65 kms canals have been completed.

A sum of ₹190.00 crore has been allocated in the budget during 2020-21 for this programme with a target to complete 100 km of lining work.

### 7. Nabakrushna Choudhury Secha Unayan Yojana

This scheme was taken up during 2017-18. The objectives are to revive the lost ayacut by restoring the irrigation system to its designed capacity, to increase irrigation area of some selected projects beyond designed capacity & equitable distribution of water and full utilization of designed irrigation potential. Many old major, medium and minor irrigation projects are presently operating below their design capacity due to deterioration of distribution system,

2 \_\_\_\_\_ Government of Odisha \_\_\_



siltation of reservoirs etc. Besides, in some of the existing major and medium irrigation projects there is a scope for increasing irrigation area beyond the designed ayacut. Extension, Renovation and Modernization (ERM) of these assets will bridge the gap between potential created and utilized to a large extent. 20 ERM works of different major and medium irrigation projects and 284 minor irrigation projects have been taken up under this scheme with a target to revive 46,296 hectares and to create new ayacut of 8,719 hectares through extension of canals with investment of ₹635.00 crore. By end of January, seven (7) ERM works of major & medium irrigation projects and 275 MIPs have been completed. Budgetary outlay of of ₹90.40 crore has been made under this scheme during 2020-21.

#### B. Minor Irrigation (Flow)

Irrigation projects within command area 40 to 2,000 hectares are executed under Minor Irrigation Organization. During 2020-21, a sum of ₹630.00 crore has been proposed in the budget for implementation of following schemes/programmes under Minor Irrigation Sector.

#### 1. Rural Infrastructure Development Fund (RIDF)

45 Minor irrigation projects with estimated cost ₹544.33 crore have been sanctioned under RIDF tranche-XIX to XXIV to create additional irrigation potential of approximately 15606 hectare. Out of this, one project have been completed, 39 projects are under progress, 2 projects are in tendering stage & 3 projects have not been taken up. By end of January 2020, an amount of ₹18.51 crore has been spent under this programme which include expenditure of ₹14.57 crore incurred during 2019-20. For the financial year, 2020-21, budgetary outlay of ₹100.00 crore has been made with a target to complete 02 projects with creation of additional irrigation potential of approximately 400 hectares. Status of RIDF Projects is given in the table below.

Table-6 RIDF Projects (Status as of January - 2020)

Tranche	Projects No(s)				Financial (	₹ in Cr)	Irrigation Potential (Ha.)		
	Taken up			Design	Created				
XIX	1	0	1	0	1.62	0.77	607	35	
XX	4	1	3	0	7.86	3.28	1280	55	
XXIV	40	0	35	2	534.85	14.46	13719	-	
Total	45 1		39	2	544.33	18.51	15606	90	



#### 2. Completion of incomplete MIPs

213 MIPs taken up under RIDF & AIBP funding could not be completed due to delay in land acquisition and forest clearance problems. In the meantime, RIDF & AIBP funding for these projects have been closed. It has been decided to complete these MIPs through State funding. Out of the this, 73 MIPs have been completed up to end of January 2020 and additional irrigation potential of approximately 21919 hectares have been created. District wise status of incomplete MIPs is given in the following table.

Table-7
Completion of Incomplete MIPs (Status as of January-2020)

S1. No.	District	Inco	omplete Proj (Nos.)	jects	Design Irr.	MIPs Comp.	Irr. Potential
		RIDF	AIBP	Total	Potential (ha)	(Nos.)	created (ha)
1	Angul	12	-	12	3180	5	190
2	Balasore	1	-	1	200	0	80
3	Baragarh	8	-	8	4019	0	2030
4	Bolangir	22	12	34	6097	7	2054
5	Boudh	5	-	5	2544	5	2649
6	Cuttack	3	-	3	1211	1	230
7	Deogarh	1	-	1	162	1	200
8	Dhenkanal	5	-	5	1609	0	380
9	Gajapati	6	-	6	871	2	280
10	Ganjam	18	-	18	3259	14	2748
11	Jajpur	4	-	4	2578	0	100
12	Jharsuguda	3	-	3	1495	1	375
13	Kalahandi	4	12	16	3368	6	1192
14	Kandhamal	5	-	5	560	3	620
15	Keonjhar	8	-	8	1390	4	937
16	Khurdha	1	-	1	120	0	40
17	Koraput	2	5	7	1933	1	285
18	Malkangiri	2	8	10	2290	1	881
19	Mayurbhanj	9	-	9	2321	6	1349
20	Nabarangpur	5	7	12	1593	4	275
21	Nayagarh	5	-	5	3055	0	475
22	Nuapada	2	5	7	1572	2	847
23	Rayagada	2	5	7	2585	1	510
24	Sambalpur	, 0		9	2438	2	1325
25	Subarnapur 4		2	6	695	0	612
26	Sundargarh	11	-	11	2442	7	1165
	Total	157	56	213	53587	73	21919

4 \_\_\_\_\_\_Government of Odisha \_\_\_\_



Apart from this, due to closure of RIDF tranche-XVI &XVII, 15 projects have remained incomplete. Since the funding is not available under RIDF, the balance work of these projects would be taken up out of state's own resources under the Completion of incomplete MIP scheme. For the financial year 2020-21, budget provision of ₹20.00 crore has been made with a target to create additional irrigation potential of approximately 1000 hectares.

#### 1. Mukshyamantri Adibandha Tiari Yojana (MATY)

This scheme was started during 2010-11. Under this scheme, Check dams are being constructed in small streams & nallahs for conservation of water to meet the domestic need of people of nearby villages, recharging ground water and for providing incidental irrigation to the crops in the nearby agriculture land. Priority is being given to Blocks having less irrigation coverage, areas where farmers are using traditional method of irrigation by constructing temporary cross bunds on streams and where farmers are willing to take up operation & maintenance of the structure. Minor Irrigation Organisation & Drainage Organisation are implementing the scheme.

During current financial year (2019-20), there is a target to complete 2000 Check dams for which an outlay of ₹333.84 crore has been made in the budget. Out of this, 343 Check dams have been completed & 738 Check dams are under construction up to end of January 2020 with an expenditure of ₹287.93 crore. Since inception of this scheme, 14931 Check dams (Major & Medium sector -1391 nos. & Minor Irrigation Sector-13,540 nos) have been completed up to end of January 2020. District-wise status of Check dams is given in the following table.

Table-8
Check Dams (Status as of January-2020)

Sl. No.	District		npleted u ch 2019 (	_	-	ted (nos -20 (Janu	during (ary-20)	Grai	Grand Total (No.)		
		Minor Irr. Sector	Maj. & Med. Sector	Total	Minor Irr. Sector	Maj. & Med. Sector	Total	Minor Irr. Sector	Maj. & Med. Sector	Total	
1	Angul	293	0	293	11	0	11	304	0	304	
2	Balasore	405	302	707	6	52	58	411	354	765	
3	Bargarh	895	0	895	2		2	897	0	897	
4	Bhadrak	97	245	342	2		2	99	245	344	
5	Boudh	249	18	267	15		15	264	18	282	
6	Cuttack	535	119	654		5	5	535	124	659	
7	Deogarh	206	0	206	1		1	207	0	207	



S1. No.	District		npleted u ch 2019 (		_	ted (nos -20 (Janu		Gra	nd Total	(No.)
		Minor Irr. Sector	Maj. & Med. Sector	Total	Minor Irr. Sector	Maj. & Med. Sector	Total	Minor Irr. Sector	Maj. & Med. Sector	Total
8	Gajapati	135	0	135	3		3	138	0	138
9	Ganjam	699	298	997	37	4	41	736	302	1038
10	Jajpur	195	74	269	4	12	16	199	86	285
11	Kandhamal	319	0	319	11		11	330	0	330
12	Kendrapada	7	84	91	15	15	30	22	99	121
13	Keonjhar	838	15	853	44		44	882	15	897
14	Khurda	476	32	508	5		5	481	32	513
15	Dhenkanal	618	0	618	10		10	628	0	628
16	Jagatsingpur	0	46	46	0		0	0	46	46
17	Jharsuguda	304	0	304	0		0	304	0	304
18	Mayurbhanj	669	0	669	28		28	697	0	697
19	Nayagarh	681	5	686	1	6	7	682	11	693
20	Puri	56	58	114	0	1	1	56	59	115
21	Sambalpur	676	0	676	11		11	687	0	687
22	Sundargarh	718	0	718	2		2	720	0	720
Sub-	Total (Non-KBK)	9071	1296	10367	208	95	303	9279	1391	10670
23	Nabarangpur	301	0	301	2		2	303	0	303
24	Nuapada	667	0	667	16		16	683	0	683
25	Rayagada	790	0	790	11		11	801	0	801
26	Subarnarpur	165	0	165	2		2	167	0	167
27	Koraput	335	0	335	3		3	338	0	338
28	Malkangiri	311	0	311	6		6	317	0	317
29	Bolangir	635	0	635			0	635	0	635
30	Kalahandi	1017	0	1017	0		0	1017	0	1017
	Sub-Total (KBK)	4221	0	4221	40	0	40	4261	0	4261
	Total	13292	1296	14588	248	95	343	13540	1391	14931

For the financial year 2020-21, programme has been made to complete the ongoing Check dams for which an outlay of ₹67.00 crore (Maj & Med- ₹30.00 cr, Minor Irr.- ₹37.00 cr) has been proposed in the budget.

16 \_\_\_\_\_ Government of Odisha \_\_\_

#### 4. Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) - Har-Khet-Ko-Pani

103 MIPs / Water bodies with an estimated cost of ₹87.50 crore to revive irrigation potential of 5,150 hectares have been sanctioned by Government of India during 2017-18 under PMKSY - Har Khet Ko Pani. Out of the this, 86 projects have been completed 15 projects are presently under progress and 02 project dropped up to end of January 2020 with total expenditure of ₹63.81 crore. Irrigation potential of approximately 4136 hectares has been revived up to end of January 2020 against the target revival of approximately 5151 hectares. It is programmed to complete all the ongoing projects during 2019-20. District wise status of these projects is given in the table below.

Table-9
MIPs under PMKSY - HKKP (Status as of January-2020)

S1.	Name of the	Project	Cost	Expdr.	Irr. Pot-		Present St	tatus	
No.	District	approved	(₹in	incurred	ential to	Comp.	Ongoing Droped		Irr. pote-
		(Nos.)	lakh)	(₹in	be revived	(Nos)	(Nos)	(Nos)	ntial rev-
				lakh)	(Ha.)				ived (ha)
1	Bolangir	16	515.50	359.85	429	13	2	1	363
2	Kalahandi	26	3647.00	2790.83	1637	23	3		1402
3	Koraput	5	320.00	185.74	157	3	1	1	123
4	Malkangiri	6	425.00	326.57	215	5	1		170
5	Nabarangpur	5	377.00	294.23	376	5	0		376
6	Nuapada	20	1400.00	1014.85	451	17	3		322
7	Rayagada	18	1658.00	1101.64	1671	14	4		1225
8	Subarnapur	7	407.95	307.55	215	6	1		155
	Total	103	8750.45	6381.26	5151	86	15	2	4136

### 5. Odisha Integrated Irrigation Project for Climate Resilient Agriculture (OIIPCRA)

OIIPCRA aims at increasing farmer's yield by diversifying and improving agricultural production, fostering climate-resilient agriculture practices and improving water productivity and access to reliable irrigation. The project will be implemented by three line-departments, i.e., (1) Department of Water Resources, (2) Department of Agriculture and Farmers Empowerment, and (3) Department of Fishery and Animal Resource Development.

Under this scheme, it is planned to renovate 538 MIPs with designed kharif command of approximately 56,293 hectares and designed rabi command area of approximately 6,543 hectares in 15 districts namely Bolangir, Balasore, Bargarh, Bhadrak, Boudh, Gajapati, Ganjam, Jajpur, Kalahandi, Kandhamal, Keonjhar, Mayurbhanj, Nabarangpur, Nuapada & Subarnapur. The



estimated cost of the project is US \$ 235.00 million (INR 1,640.10 crore approx.) of which US \$ 165 million will be funded by World Bank & US \$ 70.00 million will be borne out of state fund . The project will be implemented over a period of six years from 2019 to 2025. The Loan agreement has been signed with the Donor Agency during  $24^{th}$  October 2019. District wise MIPs included under the scheme is given in the table below.

Table-10
MIPs included under OIIPCRA

Sl.	Name of District	No. of	No. of	No of	CCA in Ha.	CCA in Ha
No.		Blocks	GPs	MIPs	(Khariff)	(Rabi)
1	Balangir	10	17	21	4,809	623
2	Balasore	5	6	6	456	-
3	Bargarh	4	19	24	2,226	279
4	Bhadrak	5	12	13	1,356	60
5	Boudh	1	8	10	755	-
6	Gajapati	1	3	3	351	121
7	Ganjam	18	172	251	18,149	722
8	Jajpur	3	3	5	598	150
9	Kalahandi	10	30	36	3,555	424
10	Kandhmal	4	6	6	452	50
11	Keonjhar	11	39	49	12,015	3,057
12	Mayurbhanj	20	82	107	11,266	1,049
13	Nabarangpur	3	3	3	125	8
14	Nuapada	2	2	2	86	-
15	Subarnpur	1	1	2	94	-
	<b>Grand Total</b>	98	403	538	56293	6543

From the above, tender process has been initiated in respect of 163 MIPs for an estimated cost of ₹241.84 crore of which agreement has been signed for 36 MIPs and work started. Budgetary outlay of ₹150.00 crore has been made during 2020-21 for implementation of this project.

#### 6. Renovation of Panchayat Tanks in KBK Districts

There is a long standing demand from Public Representatives for renovation of large tanks and ponds located in KBK districts which are under the control of Panchayati Raj & Drinking Water Department. Majority of the tanks are not providing irrigation and a few tanks have irrigation potential below 40 hectares. In the Pre-Budget Scrutiny review meeting, it is decided that DOWR to formulate a new scheme and renovate the large tanks of PR&DW

18 \_\_\_\_\_ Government of Odisha \_\_\_



Department to augment their storage capacity which will cater to the domestic needs and to provide irrigation wherever feasible. PR&DW department will identify the tanks for renovation in-consultation with MI organization of DOWR. The ownership & maintenance will remain with PR&DW department. Budgetary outlay of ₹130.00 crore has been made during 2020-21 for implementation of this scheme.

#### 7. Improvement to Tanks & MIPs

The storage capacity of many tanks and MIPs are silted up above the DSL during course of its use. These projects are now operating below their designed capacity. Therefore, de-silting of these reservoirs is necessary to restore designed live storage. Department of Water Resources have taken up renovation of some MIPs under OIIPCRA, RRR & other Schemes. Due to limitation of fund, de-silting of some tanks/MIPs could not be taken up in these schemes. To address the problem in holistic manner, a new scheme namely "Improvement to Tanks &MIPs" have been taken up. 451 tanks with an outlay of ₹245 crore have been identified for implementation over a period of 4 years i.e. from 2018-19 to 2021-22. Out of the above, work of 188 MIPs have been taken up under this scheme. Budgetary outlay of ₹10.00 crore has been made during 2020-21 for implementation of this scheme.

#### C. Parvati Giri Mega Lift Irrigation

State Government has launched this Programme during 2011-12. The objective of the scheme is to provide irrigation to the farmers in the upland areas by lifting water from rivers and reservoirs. Projects having irrigation command area within 500 to 2,000 hectares have been taken up under this scheme. Engineering, Procurement & Construction (EPC) method of bidding has been adopted for timely completion of the projects. As per terms and condition of EPC contract, the operation & maintenance of the project for a period of five years will be done by the Executing Agency after its commissioning. It is proposed to provide dedicated Power System Connectivity from Local Grid Stations to each project for un-interrupted power supply.

208 projects with an estimated cost of ₹7495.67 crore to provide irrigation to approximately 264728 hectares have been taken up under this scheme. Out of the above, 197 projects have been taken up through state budget and 11 projects have been taken up through District Mineral Foundation (DMF) fund. Apart from that, Upper Indravati Lift Canal system with an estimated cost of ₹986.71 crore to provide irrigation to CCA of approximately 26248 hectares is in progress under this scheme. The project will be completed during 2020-21. During 2019-20, there is a programme to complete ongoing 83 projects. Out of this, 12 projects have been completed with the creation of additional irrigation potential of approximately 11664 hectares up to end of



January 2020. Since inception of the programme, 92 projects have been completed and additional irrigation potential of approximately 1,06,318 hectares has been created up to end of January 2020. Clusterwise progress of Mega Lift projects are given in the following table below.

Table-11
Mega lift Irrigation (Status as of January-2020)

S1. No.	Cluster No.		ojects cen up	District to be benefitted	Estimated Cost	Expdr. as on		ojects ipleted
		No.	CCA		(₹in cr.)	01/2020	No.	CCA
			(ha.)			(₹in cr.)		(ha.)
1	XIV	13	14300	Kalahandi & Bolangir	295.47	268.12	13	14207
2	XV	15	21150	Bolangir, Sonepur & Boudh	445.49	377.67	15	20374
3	III	19	24020	Bolangir, Baragarh, Jharsuguda & Sambalpur	622.48	517.17	19	24252
4	I	8	7655	Gajapati & Raygada	247.79	208.81	5	3377
5	II	13	10980	Kalahandi, Koraput, Malkangiri & Nawarangpur	249.77	218.41	9	7282
6	VI	9	16750	Cuttack	430.64	365.91	5	9951
7	VIII	13	16200	Angul, Deogarh & Sundargarh	428.93	319.50	4	4751
8	XI	12	15595	Jajpur & Kendrapara	379.02	300.75	5	4038
9	VII	14	14255	Ganjam	449.85	468.83	8	8168
10	IX	12	14805	Sundargarh	461.17	380.89	1	807
11	Χ	13	19400	Keonjhar & Mayurbhanj	568.78	433.30	ı	-
12	XII	16	21300	Jharsuguda & Sundargarh	649.28	627.88	7	7911
13	XIII	12	10200	Kalahandi & Nuapada	311.27	234.18	ı	-
14	Mahulpali (DMF)	1	1200	Jharsuguda	29.29	28.52	1	1200
15	IV	9	12900	Sanmbalpur & Sonepur	436.82	135.52	-	-
16	V	11	16154	Angul, Boudh & Dhenkanal	521.04	117.68	-	-
17	Malkangiri	8	12964	Malkangiri	451.56	67.05	-	-
18	DMF	10	14900	Jajpur, keonjhar & Jharsuguda	517.02	97.02	-	-
	Sub-Total	208	264728		7495.67	5167.81	92	106318
19	Indravati Lift	1	26248	Kalahandi	986.71	882.76	1	-
	Total 209 290976		290976		8482.38	6020.57	92	106318

During 2020-21, there is a programme to complete 33 ongoing projects with the creation of additional irrigation potential of approximately 45,000 hectares. Budgetary outlay of ₹540.00 crore has been allocated for execution of projects under this scheme.

#### D. Minor Irrigation (Lift)

Odisha Lift Irrigation Corporation was established in the year 1973 for installation, operation and maintenance of community lift irrigation projects with command area upto 40

20 \_\_\_\_\_ Government of Odisha \_\_\_



hectares. After implementation of Pani Panchayat Act, 2002, OLIC is constructing LI Projects and handing over the same to Pani Panchayats for operation and maintenance. OLIC is no more collecting water rate from the farmers. An outlay of ₹1211.05 crore has been made in the budget during 2020-21 for schemes implemented through OLIC.

#### 1. Biju KrushakVikashYojana (BKVY)

This scheme was launched by State Government in the year 2001 with the objective to construct new minor and lift irrigation projects and to revive derelict projects through people's participation. The scheme envisages that the project selection should be done by the beneficiaries and brought to the notice of Government agencies for technical scrutiny and approval. For execution of the project in KBK & Tribal areas, Government is providing 90% of the project cost and balance 10% borne by the beneficiaries. In other districts, Government is providing 80% of project cost and balance 20% borne by the beneficiaries. The beneficiary contribution is in the form of labour, material or money. Apart from OLIC, Odisha Agro Industries Corporation is also implementing the BKVY Scheme. During current financial year (2019-20), there is a target to complete 1000 LIPs of which 796 LIPs have been completed up to end of January 2020. Since inception of this scheme, 14838 LIPs have been completed up to end of January 2020 and additional irrigation potential of approximately 323.43 thousand hectares have been created. Yearwise details are given in the table below.

Table-12 LIPS under BKVY (Status as of January-2020)

Year	Community LIP installed (No)	Irr. Potential created (th. ha)
Up to 03/2006	1648	33.38
2006-07	556	12.37
2007-08	993	20.38
2008-09	1277	28.04
2009-10	786	17.20
2010-11	596	14.23
2011-12	1047	23.25
2012-13	529	11.44
2013-14	697	15.41
2014-15	745	16.88
2015-16	1087	24.03
2016-17	1390	29.78
2017-18	1339	29.98
2018-19	1352	29.31
2019-20	796	17.75
Total	14838	323.43

During 2020-21, an outlay of ₹360.00 crore has been made under BKVY with a target to complete 1250 Community LIPs.



#### 2. Hirakud Command Area Development

For conjunctive use of water, lift irrigation projects are being constructed in the command area of Hirakud Dam. By end of March-2019, 243 LIPs have been installed in Hirakud Command area to provide irrigation to approximately 6,444 hectares. During 2019-20, it has been proposed to take up 22 LIPs with irrigation potential of approximately 528 hectares. Out of this, 16 LIPs have been constructed and additional irrigation potential of approximately 464 hectares have been created up to end of January 2020. Budgetary outlay of ₹7.00 crore has been made during 2020-21 for execution of 20 LIPs under this scheme.

#### 3. Deep Borewell Secha Karyakrama

Ground water utilization in the state is about 42%. A new scheme namely "Deep Bore Well Secha Karyakrama" under State Plan was launched during 2010-11 with an objective to provide irrigation facilities mainly to small and marginal farmers by exploiting ground water through installation of deep bore wells covering cultivated land of approximately 05 hectare in Khariff season & approximately 2 hectare in Rabi season. The unit cost of each borewell is ₹3.88 lakh. 256 blocks in 26 districts have been covered under this programme. State government is providing huge subsidy in this scheme. SC, ST farmers under BPL category are contributing only ₹10,000/- (around 3% of project cost). For farmers of general category, the contribution is limited to ₹20,000/- only (around 6% of project cost). Power supply is being made available up to the bore well point by the Department. Priority is being given to Blocks less irrigation facilities. During 2019-20, there is a target to install 20000 deep Bore Wells of which 3372 bore wells have been installed and handed over to beneficiaries as of January 2020. Since inception of the scheme, 72081 Bore wells have been energised and handed over to beneficiaries by end of January 2020. District wise status of bore wells is given in the table below.

Table-13
Deep Borewell (Status as of January-2020)

Name of the District	Drilling Successful (Nos)	Handed over to Beneficiaries upto March-19(Nos)	Programme for 2019-2020 (Nos)	Handed over to Beneficiaries during 2019-20 (Jan-20) (Nos)	Total handed over (Nos)
Angul	2967	2518	1100	2	2520
Balasore	1002	980	100	0	980
Bargarh	17272	13527	7800	967	14494
Boudh	2708	2417	100	0	2417
Cuttack	550	494	100	5	499

22 \_\_\_\_\_Government of Odisha \_\_\_



Name of the District	Drilling Successful (Nos)	Handed over to Beneficiaries upto March-19(Nos)	Programme for 2019-2020 (Nos)	Handed over to Beneficiaries during 2019-20 (Jan-20) (Nos)	Total handed over (Nos)
Deogarh	1784	1727	200	6	1733
Dhenkanal			200	13	1171
Gajapati			100	46	159
Ganjam	1996	1035	500	386	1421
Jajpur	1232	1104	200	48	1152
Jharsuguda	1951	1754	200	22	1776
Kandhamal	575	573	400	0	573
Keonjhar	1563	1540	900	0	1540
Khurda	1003	953	400	9	962
Sundargarh	6966	6080	450	157	6237
Mayurbhanja	3897	3690	150	18	3708
Nayagarh	1252	1215	400	9	1224
Sambalpur	5907	4939	300	230	5169
Sub-Total (Non-KBK)	54481	45817	13600	1918	47735
Koraput	1612	1313	1900	117	1430
Malkangiri	1898	1451	200	98	1549
Nabarangpur	4368	3345	1500	24	3369
Nuapada	4430	2983	200	444	3427
Rayagada	1273	1260	400	1	1261
Subarnapur	3306	2694	200	69	2763
Balangir	8639	6644	1500	541	7185
Kalahandi	3530	3202	500	160	3362
Sub-Total (KBK)	29056	22892	6400	1454	24346
Total	83537	68709	20000	3372	72081

Budgetary outlay of ₹350 crore has been proposed in the Financial year 2020-21 with a target to install 15,000 Deep Bore Wells.

#### 4. Revival of Defunct Lift Irrigation Projects

Every year some lift irrigation projects (LIPs) gets defunct due to various reasons such as damage of head works, damage of distribution system, theft of transformer, conductor & expiry of life span etc. Public representatives are often demanding for repairing of these defunct LIPs. Considering the demand of Public representatives, State Government has started a scheme namely Revival of Defunct LIPs during 2014-15 . It was programmed to revive 3,773 defunct LIPs through state funded "Revival of Defunct LIPs" scheme & 1,674 defunct LIPs through



SCA, RIDF funding during the period 2014-15 to 2018-19. By end of March 2019, 4414 nos. of defunct LIPs have been revived under the state funded "Revival of Defunct LIPs" scheme. Besides, 1405 LIPs have been revived from RIDF & other funding. The scheme has been extended for another five years from 2019-20 to 2023-24 in order to revive the other defunct LIPs. It is programmed to revive 3997 defunct LIPs with an estimated outlay of ₹750.00 crore. During 2019-20, there is a target to revive 939 LIPs of which 376 LIPs have been revived up to end of January 2020. District wise LIPs revived is given in the table below.

Table-14
Revival of Defunct LIPs (Status as of January-2020)

S1. No	Name of District		revived o repair		rch 2019		LIPs re luring 20 repaire	019-202	20		tal LIPs evived
		State Plan	RIDF & others	Total	Area revived (Ha.)	State Plan	RIDF & others	Total (No)	Area revived (Ha.)	Total (No)	Area revived (Ha.)
1	Angul	102	75	177	4396	0	15	15	368	192	4764
2	Balasore	449	225	674	12769	51	2	53	928	727	13697
3	Bargarh	94	1	95	2520	1	1	2	30	97	2550
4	Bhadrak	188	126	314	6511	11		11	344	325	6855
5	Bolangir	112	4	116	2436	1	0	1	24	117	2460
6	Boudh	69	0	69	1736			0		69	1736
7	Cuttack	162	85	247	5759	14	12	26	680	273	6439
8	Deogarh	16	5	21	374			0		21	374
9	Dhenkanal	138	8	146	3628	8		8	260	154	3888
10	Gajapati	32	29	61	990	2	1	3	60	64	1050
11	Ganjam	216	27	243	4120	14		14	210	257	4330
12	Jagatsinghpur	122	40	162	2964	16		16	208	178	3172
13	Jajpur	322	114	436	8768	25	11	36	725	472	9493
14	Jharsuguda	78	64	142	2995	4	20	24	376	166	3371
15	Kalahandi	151	4	155	3578	5	12	17	416	172	3994
16	Kandhamal	111	13	124	2512	6	3	9	180	133	2692
17	Kendrapara	260	54	314	7015	17		17	436	331	7451
18	Keonjhar	240	31	271	5365	42		42	732	313	6097

24 \_\_\_\_\_\_ Government of Odisha \_\_\_\_



S1. No	Name of District			J	rch 2019	LIPs revived during 2019-2020				Total LIPs revived		
		State Plan	o repair RIDF & others	Total	Area revived (Ha.)	State Plan			Total (No)	Area revived (Ha.)		
19	Khurdha	105	32	137	2963	2		2	40	139	3003	
20	Koraput	202	79	281	5847	0	5	5	104	286	5951	
21	Malakangiri	72	17	89	1750	0		0		89	1750	
22	Mayurbhanja	252	153	405	7117	2		2	24	407	7141	
23	Nayagarh	50	9	59	1307			0		59	1307	
24	Nowrangapur	153	13	166	3570	17	1	18	360	184	3930	
25	Nuapada	59	3	62	1222	8		8	160	70	1382	
26	Puri	131	23	154	3960			0		154	3960	
27	Rayagada	200	124	324	5597	28	3	31	600	355	6197	
28	Sambalpur	131	9	140	3095	13		13	256	153	3351	
29	Subarnapur	61	3	64	1940	1		1	24	65	1964	
30	Sundargarh	136	35	171	3653	2		2	40	173	3693	
	Total	4414	1405	5819	120457	290	86	376	7585	6195	128042	

Budgetary outlay of ₹190.84 crore has been proposed in the Financial year 2020-21 with a target to repair 1200 defunct LIPs.

#### 5. Pradhan Mantri Krishi Sinchayee Yojana (Har-Khet-Ko-Pani):

Government of Odisha has submitted a proposal amounting to ₹6614.00 crore to Ministry of Jal Shakti for construction of Deep Bore Wells, Shallow Tube Wells & Dug Wells under PMKSY(Har-khet-Ko-Pani). Under this proposal, it is targeted to provide irrigation to approximately 2.78 lakh hectares by utilizing ground water resources. All 30 districts of the State are to be covered under this programme. The abstract of the proposal is given in the table below.

Sl No.	Type of Structure	Nos	Area (in ha)	Estimated Cost (₹in cr)
1	Cluster Deep Bore Wells	112010	224020	4938.80
2	Cluster Shallow Tubewells	5407	27035	236.62
3	Dug Wells	26900	26900	1438.14
	Total	144317	277955	6613.56

Budgetary outlay of ₹301.05 crore has been proposed in the Financial year 2020-21. The scheme will be taken up after approval by Ministry of JalShakti



#### B. Flood Control & Drainage

#### a. Flood Control

Protecting life and properties of the people from the ravages of flood is as important as providing irrigation. Flood occurs almost in every alternate year. To mitigate flood and to arrest saline ingress, flood control embankments & saline embankments are being constructed. Raising & strengthening of embankments and new embankment construction works are being taken up mainly through RIDF scheme. So far, 7470.17 km of flood protective embankments (Capital Embankment-1717.29 km, Other Agricultural embankment-2493.11 km, Test Relief Embankment-1623.82 km, Saline Embankment- 1635.95 km) have been constructed. Flood protection and river training works are presently in progress in different rivers namely in Mahanadi, Brahmani, Kharasuan, Rushikulya, Devi ,Kelua, Vamsadhara, Bahuda, Ramnadi, Ghodahado, Genguti, Daya, Luna, Nagabali, Dahuka, Suktel, Kuakhai, Duanto, Chitrotpala, Kathajodi, Baitarani.

Under NABARD funding through RIDF scheme, 548 flood protection works with an estimated cost of ₹3905.84 crore have so far been taken up. By end of January-2020, 314 flood control projects have been completed with an expenditure of ₹2728.95 crore. Status of flood control RIDF projects is given on the table below. Apart from that 24 road projects on different flood embankments have been taken up under RIDF, out of which 20 projects have been completed as of January-2020.

Table -15
Flood protection works under RIDF (Status as of January-2020)

Tranche	N	lo(s)	Sanctioned	Expenditure	Area ben	efited (Th. Ha)
	Taken	Comp.	cost	incurred	Target	Achievement
	up		(₹ in crore)	(₹ in crore)		
RIDF-I to XVII	95	90	404.58	416.99	202.02	169.28
RIDF-XVIII	36	35	307.88	343.96	218.84	214.10
RIDF-XIX	31	30	245.41	249.37	169.13	144.13
RIDF-XX	103	90	761.19	723.16	335.58	279.45
RIDF-XXI	34	27	199.37	182.45	98.42	84.20
RIDF-XXII	88	35	565.6	391.50	198.53	87.83
RIDF-XXIII	17	4	133.64	69.63	58.11	12.93
RIDF-XXIV	73	3	868.18	351.89	230.33	3.54
RIDF -XXV	71	0	419.99	0.00	158.18	0.00
Total	548	314	3905.84	2728.95	1669.13	995.46

26 \_\_\_\_\_ Government of Odisha \_\_\_\_



During 2020-21, a sum of ₹760.00 crore (RIDF- ₹450.00 crore, State fund- ₹310.00 crore) has been proposed in the budget, out of which ₹10.00 crore has been earmarked for Pre-flood preparedness work.

#### b. Drainage

Water logging is a major problem in coastal areas. The natural flat terrain is the primary cause of drainage congestion. The drainage congestion affects the crop yield. Around 2.17 lakh hectares of agriculture land in deltaic area suffers from water logging problems. Out of which, 1.90 lakh water logged agriculture area can be retrieved. Drainage renovation works to address water logging problem are being executed through State funded Drainage Improvement Programme (DIP).

Drainage Improvement Programme (DIP) has been started during 2014-15 for addressing drainage congestion and water logging problems in the State. During 2019-20, there is a target to retrieve approximately 15540 hectares of water logged area. Out of which, approximately 9262 hectares of waterlogged area has been retrieved by renovating approximately 279 km drains by end of January 2020. Since inception of Drainage Improvement Programme, Drainage Organisation has completed renovation of approximately 5575 Km length of Drains & completed 1067 nos. of structures and an area of approximately 92,995 hectares of water logged agricultural land has been retrieved with an expenditure of ₹851.83 crore up to end of January 2020. Year wise details are given in the table below.

Table - 16
Drainage Works under DIP (Status as of January-2020)

Year	Length of drain renovated (km)	Structures completed (Nos.)	Area retrieved (ha.)	Expdr. Incurred (₹ in cr)
2014-15	227.00	73	6000	69.91
2015-16	1100.00	146	16000	112.24
2016-17	1187.00	187	16200	199.61
2017-18	1370.00	226	16220	219.53
2018-19	1092.00	156	29313	168.56
2019-20 by January 2020	599.00	279	9262	81.98
Total	5575.00	1067	92995	851.83



In addition to this, renovation of storm water drains in 14 Urban Local Bodies have been taken up under this scheme. Expenditure of ₹51.50 crore have been incurred and approximately 37 km of drainage channels have been renovated.

During 2020-21, budgetary allocation of ₹257.77crore has been proposed for drainage development activities under DIP with a target to retrieve approximately 16,938 hectares of water logged area. This provision includes ₹10.00 crore for urban drainage improvement under minor irrigation sector, ₹20.00crore for drainage improvement works executed in Sambalpur city.

#### C. Ground Water Development (GWD)

(a) The Directorate of Ground Water Development conducts survey and investigation, field study and collect different hydrological data relating to ground water resources. For quantitative study of ground water potential, water table monitoring is being done four times in a year at 1100 locations. Similarly, water quality monitoring is being done annually in 1100 locations. In addition to the above rain water harvesting, ground water recharge, remote sensing studies, feasibility of borewell works are being done by this organization. Allocation of ₹3.00 crore has been made in the budget during 2020-21 for this work.

#### (b) Rooftop Rainwater harvesting & Groundwater recharge in urban areas

This scheme has been formulated during 2014-15 to sensitize urban people to adopt rooftop rainwater harvesting and ground water recharge practice to meet their domestic water needs. The scheme is presently implemented in 11 urban local bodies (ULBs) namely Bhubaneswar, Berhampur, Titilagarh, Jharsuguda, Bolangir, Puri, Cuttack, Angul, Talcher, Sambalpur & Rourkela. Private buildings up to three storied with roof area less than 200 square meters are eligible under this scheme. Incentives to the extent of ₹45000/- (Rupees Forty Five thousand) and technical assistance are being provided to private buildings owners interested to implement the scheme. Besides, Government buildings are also being taken up under this scheme. As of March-2019, Roof Top rain Water Harvesting structure has been installed in 358 Government building 9,438 private buildings. Yearwise details are given in the following table.

28 \_\_\_\_\_ Government of Odisha \_\_\_



Table - 17
Status of Roof Top Rain Water Harvesting

S1.	Towns	Gov	t. Build	ings pro	vided wit	h RRHS	(Nos.)	Priv	ate Bui	ldings <sub>I</sub>	provided	with RR	HS (Nos.)
No		FY	FY	FY	FY	FY		FY	FY	FY	FY	FY	
		2014-	2015-	2016-	2017-	2018-	Total	2014-	2015-	2016-	2017-	2018-	Total
		15	16	17	18	19		15	16	17	18	19	
1	Bhubaneswar	8	37	32	26	28	131	-	383	698	1153	2708	4942
2	Berhampur	5	25	21	13	34	98	-	131	314	476	953	1874
3	Bolangir		7	6	6	5	24	-	59	108	225	200	592
4	Jharsuguda		9	15	6	4	34	-	48	156	180	349	733
5	Titilagarh		2	2	6	2	12	-	6	38	112	63	219
6	Puri					34	34					529	529
7	Cuttack					7	7					123	123
8	Angul					5	5					54	54
9	Talcher					3	3					19	19
10	Sambalpur					3	3					277	277
11	Rourkela					7	7					76	76
	al Physical nievement (Nos.)	13	80	76	57	132	358	0	627	1314	2146	5351	9438

During 2019-20, an outlay of ₹24.79 crore has been made with a target to construct roof top rainwater harvesting structure in 5500 private buildings and 65 Government buildings. Besides, department has prepared one new scheme to take up ground water recharge in 49 water stressed block for which an outlay of ₹20.00 crore has been made during 2019-20. Since the objective of two schemes are similar, it was decided to club up both the schemes and formulate one new scheme namely "Roof Top Rain Water Harvesting and ground water recharge in 27 Urban Local Bodies & 49 water stressed blocks". Accordingly, the new scheme has been formulated with an estimated outlay of ₹246.00 crore to be implemented over a period of five years from 2019-20 to 2023-24. The proposal was submitted to Expenditure Finance Committee for consideration. The EFC during scrutiny of proposal has suggested for third party evaluation of the earlier roof top rainwater harvesting scheme implemented by department. Till such evaluation and submission of report thereof, the proposal is deferred. Budgetary outlay of ₹37.00 crore has been proposed during 2020-21 under the new scheme.

#### D. Command Area Development & Water Management (CAD&WM)

Command Area Development Programme is being implemented in the State since 1976-77 with an aim of optimum use of water to enhance agricultural production and productivity. The main activities under CAD&WM are construction of field channels & field drain. Besides, topographical survey and investigation, reclamation of water logged areas, farmers' training, crop demonstration & formation of Pani Panchayats (WUAs) etc are also being taken up by Command Area Development Organisation.



Total 38 major & medium irrigation projects have been taken up under this programme. Out of which, 19 projects are presently in progress and 19 projects have been completed. From 2016-17, funding from MOWR has been ceased and State fund is being utilized to complete all the ongoing projects. During 2019-20, there is a target to construct field channel covering 75307 hectares and field drain covering 15380 hectares. Later, the financial target has been revised ₹191.24 crore and the target for field channel has been revised to approximately 45206 hectares. Further, it was decided that field drain work here after shall be taken up through MGNREGS. Against the revised target, during 2019-20, expenditure of ₹64.38 crore has been made and field channel of approximately 4902 hectares have been constructed up to end of January 2020. Project wise status is given in the following table.

Table -18
CAD&WM Works (Status as of January-2020)

S1.	Name of the Project	Field cl	hannel (Th. Ha.)		Field Drain (Th. Ha.)
No.		Completed upto March-2019	Completed during 2019-20 up to Jan 20	Total	Completed upto January-2020
	A. Ongoing Projects				
1	Mahanadi Delta St-I	163.954	1.096	165.050	55.214
2	Mahanadi Delta St-II	122.704	0.210	122.914	56.694
3	Rushikulya	57.862	0.050	57.912	7.402
4	Salandi Right	29.891	0.390	30.281	10.509
5	Potteru-Satiguda	65.911	0.000	65.911	4.150
6	Baitarani	28.445	0.130	28.575	14.734
7	Upper Indravati	69.053	0.276	69.329	27.896
8	Rengali	28.613	0	28.613	6.599
9	Kalo	1.700	0.600	2.300	0.000
10	Khadkhai	3.200	0.600	3.800	0.000
11	Bahuda	2.800	0.600	3.400	0.075
12	Baghua	4.266	-	4.266	0.400
13	Badanala	7.500	-	7.500	0.650
14	Utei	2.900	-	2.900	0.200
15	Hariharjore	0.500	-	0.500	0.000
16	Aunli	1.000	-	1.000	0.000
17	Upper Jonk	4.119	0.300	4.419	0.200
18	Jharbandh	-	0.650	0.650	
19	Saipala	-	0.000	0.000	
	Total	594.418	4.902	599.320	184.723

\_ Government of Odisha \_\_\_

Sl.	Name of the Project	Field cl	hannel (Th. Ha.)		Field Drain (Th. Ha.)
No.		Completed upto March-2019	Completed during 2019-20 up to Jan 20	Total	Completed upto January-2020
	B. Completed Projects				
1	Salandi Left	43.317	-	43.317	11.912
2	Salia	9.523	-	9.523	0.000
3	Pitamahal	1.106	-	1.106	0.050
4	Talasara	0.524	-	0.524	0.000
5	Daha	4.657	-	4.657	0.390
6	Kansbahal	4.578	-	4.578	0.295
7	Kuanria	3.780	-	3.780	0.452
8	Salki	17.829	-	17.829	0.251
9	Hirakud	153.395	-	153.395	51.799
10	Gohira	8.304	-	8.304	1.715
11	Sunei	9.825	-	9.825	3.003
12	Remal	4.313	-	4.313	0.600
13	Upper Kolab	35.136	-	35.136	10.893
14	Bankabahal	7.140	-	7.140	1.050
15	Kanjhari	9.228	-	9.228	1.700
16	Ramial	6.079	-	6.079	1.800
17	Ong	10.005	-	10.005	1.000
18	Jayamangal	4.902	-	4.902	1.325
19	Derjang	5.648	-	5.648	1.400
	Total	339.289	0.000	339.289	89.635
	Grand Total	933.707	4.902	938.609	274.358

Budgetary outlay of ₹300.00 crore has been proposed during 2020-21 with a target to construct approximately 77,143 hectares of field channel.

#### E. Pani Panchayats

Participatory Irrigation Management (PIM) was started in the state during 1995 on a pilot basis in four projects. Water User Associations were formed in these pilot projects. During 2000, the programme was extended to all commands of Major, Medium, Minor & Lift Irrigation Projects and water user associations were renamed as Pani Panchayats. Legal status has been provided to Pani Panchayats by enacting Odisha Pani Panchayat Act 2002 & the Odisha Pani



Panchayat Rule 2003. The Act was subsequently amended during 2008 & 2014. Operation & maintenance of minor and sub-minor canals of major and medium irrigation projects are being done through Pani Panchayats. Grant-in-Aid is provided to Pani Panchayats for maintenance of canals of irrigation projects. Small irrigation projects such as Community Lift Irrigation Projects after installation have been handed over to Pani Panchayats for operation and maintenance. The detail status of Pani Panchayats is given in the table below.

Table-19
Pani Panchayats (Status as of January-2020)

(Area in lakh Ha.)

Sector	Programme for formation of PP		Deline Comp		Handed Over to PPs		
	Nos.	Area	Area Nos. Area		Nos.	Area	
Major & Medium	2634	11.54	2614	11.45	2579	11.31	
Minor	2897	3.97	2897	3.97	2645	3.64	
Community LIPs	29801	6.60	27522	6.08	27522	6.08	
TOTAL	35332	22.11	33033	21.50	32746	21.03	

#### F. Water & Land Management Institute (WALMI)

WALMI was established in the state during the year 1984 under erstwhile Irrigation & Power Department (now the Department of Water Resources). The institute was registered as a Society under the Societies Registration Act-1860. Since then, the institute has been functioning as an autonomous body receiving Grant-in-Aid form the Department of Water Resources, Government of Odisha. The main objectives of WALMI are to impart advanced training to the Officers associated in the area of Water and Land Management and capacity building of farmers and office bearers of Pani Panchayats. Besides, it conducts action research in irrigation projects, applied and adaptive research in water management in agriculture. WALMI also undertakes consultancy works in participatory irrigation management including formation of Pani Panchayats, Distributaries Committee and Entry point activities of Pani Panchayats.

During 2019-20, WALMI has fixed target to impart training to 6000 farmers and 1000 officers. Out of which, WALMI has imparted training to 4713 participants comprising of 4165 farmers and 548 officers up to end of January 2020. During 2020-21, the WALMI has proposed to impart training to 7000 farmers and 1000 officers. An outlay of ₹2.00 crore has been made in the budget as grant-in-aid to WALMI.



#### G. Odisha Construction Corporation Limited (OCC)

The Odisha Construction Corporation Limited is a Government owned Construction Company established in the year 1962 to undertake specialized civil and mechanical construction works. During last 58 years of its existence, the Company has successfully executed wide variety of works awarded by the State Government, Central Government and Central and State Public Sector Undertakings. These include Balimela Hydro-Electric Project, Indravati Hydro-Electric Project, Upper Kolab Hydro Electric Project, Rengali Dam Project, Mahanadi Barrage Project, Samal Barrage Project, Mahendratanaya Barrage, Rengali Left Bank Canal Project, Lower Indra Spillway, Ret Spillway, Telengiri Spillway, Manjore, Harabhangi, Upper Jonk, Hariharjore, Baghalati, Talcher Thermal Power Project, Talcher Super Thermal Power Project, Rayagada-Koraput Railway Project, Paradeep Port works and various works awarded by NALCO Ltd., Rourkela Steel Plant Ltd. and Nilachal Ispat Nigam Ltd. Besides above, the Corporation has constructed a number of School Buildings, Cyclone Shelters and roads under Pradhan Mantri Grama Sadak Yojana.

The Corporation is now executing works in Lower Suktel Dam & Spillway, Rengali Right & Left Canal, Anandapur Barrage Gate Works, Kanupur Spillway & gate works, Drainage work at Sambalpur, Deo Dam & Spillway, Haladia Spillway, Ghatakeswar, Renovation of Mahanadi Barrage Project and Flood control works.

The work load of the Corporation as on 01.04.2019 is ₹1107.40 crore. The Corporation has signed a MOU with DOWR to execute work worth of ₹500.00 crore during 2019-20. Out of this, work worth of ₹405.87 crore has been executed up to end of January 2020. The Corporation has set target to execute work worth of ₹700.00 crore during 2020-21. The Corporation is earning profit continuously for last several years. The Corporation has earn a net profit of ₹50.12 crore upto 2018-19.

#### H. OTHER ACTIVITIES

#### 1. Survey & Investigation

Survey & investigation form an integral part of irrigation development. The Project Planning, Formulation & Investigation (PPF&I) wing has been entrusted with the tasks of survey and investigation works of new major and medium irrigation projects, preparing feasibility report (FR) & Detailed Project Report (DPR), co-coordinating with different departments of State Government & different Ministries of Government of India for obtaining technical and



other statutory clearances. Status of activities of New Irrigation Projects are given in the following table.

Table- 20 New Irrigation Projects identified by PPF&Inv. (Status as of January-2020)

Sl. No.	Description	CCA (Th. Ha.)	Name of the Project
1	TAC Cleared	197.49	Samakoi Barrage, Brutang Dam, Ong Dam, Dhauragoth, Ib Dam, Sono Barrage, Bankatira, Upper Lanth, Sandul Barrage
2	DPR Accepted by CWC	63.73	Aheerajore Barrage, Ranjore Dam, Jeera Dam, Turi Guntat D/W, Mankada Dam, Lower Nagavali Dam, Champalijore Dam, Hidsingh Dam, Kultulisingha Dam, Korapani Dam, Budhabalanga Barrage &Lower Lanth(Tustapali)
3	DPR submitted to CWC	116.19	Khairibhandan Barrage, Laxmipathar Dam, Kala Barrage, Uper Vansadhara Dam, Lower Vansadhara (Stage-I), Tel Integrated Dam, Nabarangpur Irrigation, Middle Kolab, Upper Udanti Barrage & Lamdora Dam.
4	DPR under Preparation	67.17	Surubalijore Dam, Uttei-Roul Integrated Barrage & Dam), Hinjili Dam, Brahmanapada Dam & Katra Barrage
5	Feasibility Report Submitted to CWC	132.53	Samij Dam, Katangi Dam, Lower Udanti Barrage, Teljori Dam , Chandrinalla Dam, Khadago Barrage & Upper Samakoi Dam

## 2. Ground Water Recharge and Solar micro irrigation to ensure food security and enhance resilience in vulnerable tribal areas of Odisha under Green Climate Fund (GCF):

This project is proposed to be implemented through Odisha Community Tank Development and Management Society (OCTDMS). Construction of ground water recharge structures in 10,000 tanks (PR&DW Deptt-9000 nos, MI Tanks-1000 nos) in 15 water stressed districts of Odisha, i.e. Nuapada, Kandhamal, Kalahandi, Koraput, Rayagada, Gajapati, Malkanagiri, Sambalpur, Bargarh, Bolangir, Boudh, Sonepur, Nabarangpur, Mayurbhanj and

34 \_\_\_\_\_Government of Odisha \_\_\_



Keonjhar shall be taken up under this scheme. The financial outlay of this project is 141.63 million US\$ out of which 31.63 million US\$ is proposed as a grant from Green Climate Fund (GCF). Remaining 110 million US\$ will be co-financed by DoWR through lead financial institution as IBRD loan and from MGNREGS. The tank renovations shall be done by respective Departments with funding from MGNREGS. 500 JEs/AEs/Officers of Implementing Departments working at Block level will be trained to construct/ maintain/ monitor the proposed 10,000 Ground Water Recharge Systems (GWRS) including preparation of DPRs. Directorate of Ground Water Development (GWD) will be responsible for geo-physical tests, monitor ground water table and water quality. NABARD has been requested to move GCF to consider OCTDMS as Implementing Agency.

#### 3. 35% Irrigation Programme:

To rationalize the irrigation development in the state, a programme has been made during 2005-06 to provide irrigation facilities to at least 35% of the cultivable land in each block. 198 blocks were identified having less than 35% irrigation facility. Apart from ongoing irrigation projects, other micro irrigation schemes viz; Deep Bore Wells, Check Dams, Shallow Tubewells, Micro River lifts, Mega Lift Irrigation are taken up in large scale to achieve the target. By end of December 2019, out of 198 deficit blocks, 130 blocks have achieved 35% irrigation coverage.

\* \* \* \* \* \* \* \*

## COMPARATIVE STATEMENT ON BUDGETARY OUTLAY FOR THE FINANCIAL YEAR 2018-19, 2019-20 & 2020-21

(₹ in lakh)

			`	iakn)
SI. No.	Sector/ Scheme	Budget Estimate (B.E.) 2018-19	Budget Estimate (B.E.) 2019-20	Budget Estimate (B.E) 2020-21
	PROGRAMME EXPENDITURE			
A.	Major & Medium Irrigation Sector			
i	Externally Aided Projects			
	(a) JICA Assisted Projects	30200.00	30000.00	32416.08
	(b) OIIAWMIP	29800.00	0.00	0.00
	(c) DRIP	24000.00	25700.10	12500.00
	Sub-Total (EAP)	84000.00	55700.10	44916.08
ii	PMKSY Projects	242921.12	186082.28	181078.98
iii	National Hydrology Project -III	914.55	0.00	939.00
iv	NABARD (RIDF)	5540.00	2457.46	590.00
iv	State funded Projects			
	(a) Check dams and Barrages	4915.00	4384.00	3000.00
	(b) Canal Lining & System Rehabilitation Programme (CLSRP)	12500.00	20000.00	13000.00
	(c) Water Sector Infrastructure Development Programme (WSIDP)	81647.00	70349.31	56598.93
	(d) Irrigation Road Construction & Improvement Scheme (IRC&IS)	100.00	0.01	0.01
	(e) Irrigation Building Development Scheme (IBDP)	500.00	500.00	500.00
	(f) Nabakrushna Choudhury Secha Unayana Yojana (NKCSUY)	10900.00	13800.00	9040.00
	(g) ERM of Major & Medium Projects	100.00	516.00	25.00
	(h)Renovation of Canal & Embankment Roads (RCER)	12500.00	25000.00	0.01
	(i) Construction of In-stream Storage Structure	0.00	1000.00	109200.00
	(j) Other Works	26809.15	21050.23	12134.97
	Sub-Total (State fund)	149971.15	156599.55	203498.92
	Total (Major & Medium)	483346.82	400839.39	431022.98

36 \_\_\_\_\_Government of Odisha \_\_\_



B.         Minor Irrigation (Flow)         1.         Odisha Integrated Irrigation Project for Climate Resilient Agriculture (OIIPCRA)         4100.00         15000.00           ii         NABARD Assisted Projects         500.00         10000.00           iii.         RRR with Domestic support         7750.00         1800.00           iv         State funded Projects         25000.00         25000.00           (a) Check Dam         25000.00         5000.00           (b) Improvement to Check Dams         5000.00         5000.00           (c) Canal Lining & System Rehabilitation Programme (CLSRP)         500.00         1000.00           (d) Drainage Improvement Programme (DIP)         1500.00         2000.00           (e) Completion of Incomplete MI Projects         1000.00         1000.00           (f) Nabakrushna Choudhury Secha Unayana Yojana (NKCSUY)         2900.01         800.00           (g) Other works (WSIDP etc.)         2900.01         7800.00           (h) Improvement to tanks &MIPs         3000.00         4400.00           (i) Dam Protection & Improvement works         7000.00         5000.00           (k) Renovation of Panchayat Ponds and Tanks         0.00         0.00	15000.00
Agriculture (OIIPCRA)	15000.00
iii.         RRR with Domestic support         7750.00         1800.00           iv         State funded Projects         25000.00         25000.00           (a) Check Dam         25000.00         25000.00           (b) Improvement to Check Dams         5000.00         5000.00           (c) Canal Lining & System Rehabilitation Programme (CLSRP)         500.00         1000.00           (d) Drainage Improvement Programme (DIP)         1500.00         2000.00           (e) Completion of Incomplete MI Projects         1000.00         1000.00           (f) Nabakrushna Choudhury Secha Unayana Yojana (NKCSUY)         2900.01         800.00           (g) Other works (WSIDP etc.)         2900.01         7800.00           (h) Improvement to tanks &MIPs         3000.00         4400.00           (i) Dam Protection & Improvement works         7000.00         2500.00           (j) Major works         7000.00         5000.00           (k) Renovation of Panchayat Ponds and Tanks         0.00         0.00	
iv         State funded Projects           (a) Check Dam         25000.00           (b) Improvement to Check Dams         5000.00           (c) Canal Lining & System Rehabilitation Programme (CLSRP)         500.00           (d) Drainage Improvement Programme (DIP)         1500.00           (e) Completion of Incomplete MI Projects         1000.00           (f) Nabakrushna Choudhury Secha Unayana Yojana (NKCSUY)         2900.01           (g) Other works (WSIDP etc.)         2900.01           (h) Improvement to tanks &MIPs         3000.00           (i) Dam Protection & Improvement works         7000.00           (j) Major works         7000.00           (k) Renovation of Panchayat Ponds and Tanks         0.00	10000.00
(a) Check Dam       25000.00       25000.00         (b) Improvement to Check Dams       5000.00       5000.00         (c) Canal Lining & System Rehabilitation Programme (CLSRP)       500.00       1000.00         (d) Drainage Improvement Programme (DIP)       1500.00       2000.00         (e) Completion of Incomplete MI Projects       1000.00       1000.00         (f) Nabakrushna Choudhury Secha Unayana Yojana (NKCSUY)       2900.01       800.00         (g) Other works (WSIDP etc.)       2900.01       7800.00         (h) Improvement to tanks &MIPs       3000.00       4400.00         (i) Dam Protection & Improvement works       7000.00       2500.00         (j) Major works       7000.00       5000.00         (k) Renovation of Panchayat Ponds and Tanks       0.00       0.00	0.04
(b) Improvement to Check Dams       5000.00       5000.00         (c) Canal Lining & System Rehabilitation Programme (CLSRP)       500.00       1000.00         (d) Drainage Improvement Programme (DIP)       1500.00       2000.00         (e) Completion of Incomplete MI Projects       1000.00       1000.00         (f) Nabakrushna Choudhury Secha Unayana Yojana (NKCSUY)       2900.01       800.00         (g) Other works (WSIDP etc.)       2900.01       7800.00         (h) Improvement to tanks &MIPs       3000.00       4400.00         (i) Dam Protection & Improvement works       7000.00       2500.00         (j) Major works       7000.00       5000.00         (k) Renovation of Panchayat Ponds and Tanks       0.00       0.00	
(c) Canal Lining & System Rehabilitation Programme (CLSRP)       500.00       1000.00         (d) Drainage Improvement Programme (DIP)       1500.00       2000.00         (e) Completion of Incomplete MI Projects       1000.00       1000.00         (f) Nabakrushna Choudhury Secha Unayana Yojana (NKCSUY)       2900.01       800.00         (g) Other works (WSIDP etc.)       2900.01       7800.00         (h) Improvement to tanks &MIPs       3000.00       4400.00         (i) Dam Protection & Improvement works       7000.00       2500.00         (j) Major works       7000.00       5000.00         (k) Renovation of Panchayat Ponds and Tanks       0.00       0.00	3200.00
Programme (CLSRP)	500.00
(e) Completion of Incomplete MI Projects       1000.00       1000.00         (f) Nabakrushna Choudhury Secha Unayana Yojana (NKCSUY)       2900.01       800.00         (g) Other works (WSIDP etc.)       2900.01       7800.00         (h) Improvement to tanks &MIPs       3000.00       4400.00         (i) Dam Protection & Improvement works       7000.00       2500.00         (j) Major works       7000.00       5000.00         (k) Renovation of Panchayat Ponds and Tanks       0.00       0.00	6000.00
(f) Nabakrushna Choudhury Secha Unayana Yojana (NKCSUY)       2900.01       800.00         (g) Other works (WSIDP etc.)       2900.01       7800.00         (h) Improvement to tanks &MIPs       3000.00       4400.00         (i) Dam Protection & Improvement works       7000.00       2500.00         (j) Major works       7000.00       5000.00         (k) Renovation of Panchayat Ponds and Tanks       0.00       0.00	1000.00
Yojana (NKCSUY)       2900.01       7800.00         (g) Other works (WSIDP etc.)       2900.01       7800.00         (h) Improvement to tanks &MIPs       3000.00       4400.00         (i) Dam Protection & Improvement works       7000.00       2500.00         (j) Major works       7000.00       5000.00         (k) Renovation of Panchayat Ponds and Tanks       0.00       0.00	2000.00
(h) Improvement to tanks &MIPs       3000.00       4400.00         (i) Dam Protection & Improvement works       7000.00       2500.00         (j) Major works       7000.00       5000.00         (k) Renovation of Panchayat Ponds and Tanks       0.00       0.00	0.01
(i) Dam Protection & Improvement works7000.002500.00(j) Major works7000.005000.00(k) Renovation of Panchayat Ponds and Tanks0.000.00	11099.99
(j) Major works 7000.00 5000.00 (k) Renovation of Panchayat Ponds and Tanks 0.00 0.00	1000.00
(k) Renovation of Panchayat Ponds and Tanks 0.00 0.00	100.00
	100.00
Total (MI) 68150.02 81300.00	13000.00
	63000.04
C.         Mega Lift Irrigation         180216.44         177666.57	54000.00
D. Ground Water Development	
i Direction & Administration 60.00 521.00	300.00
ii Roof Top Rainwater Harvesting & Ground Water recharge in 27 urban local bodies & 49 water stressed blocks	3700.00
Total (GWD) 1500.00 5000.00	4000.00
E. Orissa Lift Irrigation Corporation	
i BKVY (RIDF) 29000.00 40000.00	36000.00
ii BKVY (SCA) 0.03 0.00	0.00
iii Hirakud Command Area Development 700.00 700.00	700.00
iv Revival of Defunct Lift Irrigation Projects 12000.00 11000.00	19084.00
v Pani Panchayat Dakshyata Vikash Karyakrama 3000.00 0.00	0.00
vi         Others         0.00         0.00	216.00



SI. No.	Sector/ Scheme	Budget Estimate (B.E.) 2017-18	Budget Estimate (B.E.) 2018-19	Budget Estimate (B.E) 2019-20
vii	Har khet Ko Pani (HKKP)-CSS	0.00	0.00	30104.98
viii	Sustainable Harnessing of groundwater in water deficit areas	0.00	0.00	35000.00
	Total (OLIC)	44700.03	51700.00	121104.98
F.	Command Area Development	19990.00	31376.18	30000.00
G.	Flood Control & Drainage			
i	NABARD Assisted Projects			
	(a) Flood Control works	46000.00	46000.00	45000.00
	(b) Drainage Works	340.00	0.00	0.00
	Sub-Total (RIDF)	46340.00	46000.00	45000.00
ii	State funded Projects			
	(a) Flood Control works	31160.00	15300.00	16800.00
	(b) Restoration of Flood & Cyclone damage works	0.00	13000.00	14200.00
	(c)Drainage Improvement Programme(DIP)	22500.00	18000.00	24776.99
	(d) MCII-II	0.00	2500.00	0.00
	(e) Dredging of river mouth & hyacinth clearance	0.00	2000.00	0.01
	(f) WSIDP (MCII)	0.00	0.00	5223.00
	Sub-Total (State fund)	53660.00	50800.00	61000.00
	Total (Flood Control & Drainage)	100000.00	96800.00	106000.00
	TOTAL (Programme Expenditure)	897903.31	844682.14	809128.00
	ADMINISTRATIVE EXPENDITURE			
1	Major & Medium Irrigation	71485.04	73162.39	73636.91
2	Minor Irrigation	23022.05	24254.08	25033.26
3	Lift Irrigation	1915.01	1926.51	1926.51
4	GWS&I	1651.63	1635.13	1775.12
5	CAD & WM	1440.81	1787.68	1685.84
6	Flood Control & Drainage	16655.24	17848.50	18017.24
7	Other Works	5532.22	6046.24	6243.23
	Total ( Administrative Expenditure)	121702.00	126660.53	128318.11
	Grand Total	1019605.31	971342.67	937446.11

