

Hon'ble LG laid stone of Khudirampur Dam



Hon'ble Lt. Governor during his recent visit to North and Middle Andaman laid stone for construction of concrete dam at Khudirampur Village, Diglipur over Kalpong River in the presence of Hon'ble Member of Parliament Shri Bishnu Pada Ray, Chief Secretary Shri. Anand Prakash IAS and Chief Engineer-cum-Secretary(PWD) also accompanied them on the occasion.

Hon'ble Lt. Governor during function expressed happiness over proposal for construction of dam at this site, which shall augment water supply to rural areas of Diglipur. He directed APWD officials to ensure early completion of all formalities and start the work at the earliest possible time.

Proposed new dam is located near Khudirampur village. Height of dam is 14 meter and length of embankment is 130 meters, which shall make it third largest dam in island apart from the existing Dhanikhari and under construction Kamsarat Nallah Dam. Total catchment area of dam is about 275 hectare and it will make available 809.75 Million Liters water for drinking purpose. Tentative cost of project is Rs.31.24 Crore with a project period of two years.

Preliminary work on construction of third largest Dam at Khudirampur in Diglipur Tehsil of North and Middle Andaman District is in full swing. Geological investigation for the project has already been completed. Detail Project Report (DPR) has been cleared by Standing Finance Committee and proposal is under Process for obtaining approval of Hon'ble LG. Work will be taken up by Andaman Public Works Department as soon as approval is received.

Bridge at Sitanagar and Khudirampur opened for Public



Two RCC bridges were opened at Sitanagar Ward No.5 (Top) and Khudirampur Village Ward No.4 (bottom) for Public. These two villages are some of the oldest habitation in Diglipur. Sita Nagar is located near NH-4 and a all weather rural road connects Khudirampur from Diglipur. However, people faced difficulties in traveling to the villages due to presence of seasonal Nallah en-route to the villages. Difficulties were unbearable during rainy season and the worst affected were children, elderly people and women. It was a long pending demand of Sitanagar and Khudirampur villagers to provide all weather connectivity to these villages by construction of suitable cross drainage work.

Accordingly Construction of 37.95 Meter long, 8 meter wide RCC Box Cellular Bridge (8Nos. cells each of 4mx4m size) to connect the villages of Ward No.5 of Sitanagar to main road (NH-4) and RCC Cell Type Bridge to connect the Khudirampur village Ward No.4 to Diglipur headquarters through rural road was taken up by APWD.

These bridges shall also benefit farmers of these areas to transport their agricultural products timely to main market for sale, which shall improve social and economic life of the villagers. Further, Bridge at Khudirampur will also provide connectivity to the dream project of Khudirampur Dam site.



Rain water Harvesting: prospect in Andaman

Andaman and Nicobar is blessed with unique geographical location to ensure two climatic zones. North and South Andaman group are predominantly under tropical climatic zone while part of southern group is under influence of equatorial climatic condition. Most of islands in Andaman receives rainfall from both monsoons i.e. South Western monsoon during May to October and November to January due to North Eastern (returning) Monsoon.

Returning monsoon provide intermittent rain till January each year. Accordingly dry period infact is from January to May each year effectively 4 months only. However, some time rain received during North-West monsoon is not sufficient and in such conditions dry spell may extend to about 6 months.

Worse case was observed during 2007 after occurrence of Tsunami in 2004 when water crisis was severest in main city of Port Blair. Its effect was also felt in other places. Now, after completion of rising of Dhanikhari Dam, problem of Port Blair city has been solved for around next twenty years. However, situation in the far off places remains more or less same. With due stress on providing high quality facilities and living condition requirement of water is likely to increase substantially in rural, as well as in urban areas.

Options of developing water resources are very limited considering topography, scare resources and small yield. Andaman receives huge amount of rain fall, which goes to sea as runoff without being tapped. CGWB has suggested that considering the soil structure of Island ground water recharge using rain water is not possible everywhere. Smaller rain water harvesting system constructed earlier in public and private building failed miserably to support demand during long dry period.

In such a situation economical solution of rain water harvesting lies in promoting rain water harvesting to the extent of requirement of at least 3-4 months, which will be about 30-35 Thousand Liters for a family of five persons. Stored rain water will not only supplement peak summer acute shortage but also ensure sustainable water to each family without much difficulty. This type of rainwater harvesting can be promoted in rural areas by providing incentive on water taxes in urban and rural areas and subsidizing components such as PVC storage tanks and collection gutters.

This type of arrangement shall also help in reducing running and maintenance cost substantially since during long rainy season water demand will reduce considerably saving precious fossil fuel and reducing green house gases.

GO GREEN, ADOPT RAIN WATER HARVESTING

Storm water drainage at Port Blair

Andaman & Nicobar Island is blessed with 3100 mm of rain fall on an average each year. Various places including Port Blair city has faced flooding during heavy rainfall accompanied with high tide which has created hardship for residents of many low lying areas where drainage become difficult during this condition. Worse affected areas are Mohanpura, Airport and Junglighthat in Port Blair.

Many studies has been carried out to solve routine flooding in these places in such critical conditions and some of recommendations is also being implemented which include widening of drain near Mohanpura, Phoenix Bay areas which shall increase storage capacity and reduce flooding considerable but it will not help in improving drainage during high tide condition.

Problem in these areas can be seen from other prospect as well. Most of the rain water received through drains of Mohanpura is from the drains located at Middle Point, Goalghar, Post Office and Aberdeen Bazaar areas, which are at higher elevation. During dry period these drain acts as sewerage system and carry domestic liquid waste at most which has very low volume. Storm water received during rainy season is huge and can be used for secondary purpose such as washing, agriculture and other requirements if not contaminated with sewage. Many cities have separate storm water system in addition to sewerage system to economize sewerage construction as otherwise cost will be very high due to huge maximum discharge.

Considering these facts a separate storm drainage system can be proposed to carry excess water during rainy season from drain of Minnie Bay, Goalghar, Post office and Bengali Club in the form of close conduit which shall join a major conduit at Indira Bhawan/ Light house. This line can be extended to discharge point at Phoenix Bay Jetty. Since storm water drain will have high kinetic energy water will be discharged in seas even during high tide condition. Water in the conduit can also be stored by allowing discharge point at higher elevation such as near Megapode nest foreshore road.

Er. M.K. Chadda

M/s Kallash Engineering

Editorial

Greetings to all in New Year 2015. As we greet everyone on New Year, I also welcome all to face next edition of challenges. These challenges are becoming tougher each year. Technology is changing every day. To cope with ever increasing problem, we lack in implementation due to huge gap in knowledge sharing at ground level. This gap can be abridged by latest in Information Technology. Problem solving can be substantially improved by sharing innovative ideas from person directly involved with work.

Therefore I request all engaged in the field of construction to share their experiences through our face book site NIRMATRI.

Indian Building Congress

Indian Building Congress proposes to organize an orientation program, for junior engineers and site engineers on Recycle Reuse and Reduce at site, as a initiative to implement Green Building construction practices at site. Initially this program will be held for working division in and around Port Blair and later on extended to other part of Port Blair area.

ANSWSM

- National Awareness Week 2015-16



National awareness week was organized by Andaman Nicobar State Water and Sanitation Mission during 16th-22nd March, 2015, as part of nation wide program to promote cleanliness in public places and water conservation. As part of function a week long poster exhibition was organized in all Panchayat Samiti Offices. A series of 20 Nos. Flexi posters were displayed at Ferrargunj Tehsil and Prothrapur Panchayat meeting hall, 7 Nos. paper posters were displayed at various out station Panchayat Samiti Offices. Exhibition was inaugurated by respective Pramukhs of each area and kept open for public opinion for seven days.

In addition to above, cleanliness drive and other awareness programme was also organized in various panchayats and villages including cleanliness of public places and public buildings such as Sub-Center, Aganwadi etc.

- Workshop on Solid Waste Management and Water Resource Conservation at Dollygunj Panchayat.

ANSWSM organized a workshop on solid waste management and water resource conservation on 25.03.2015 for PRI and Self Help Group. Program was also attended by outgoing project coordinator of ANSWSM to make them aware of opportunity in waste management in rural area. Programme included Audio-Video presentation and demonstration on solid waste management, segregation at sources and waste reduction by promoting recycle and reuse alongwith promotion of Vermi-Composting in house hold for organic waste treatment.

Department of small scale Industry was also tied up for opinion on developing a solid waste management system as part of small scale industry.

Participants were also informed on methods of water resources conservation and need for rain water harvesting in rural areas to deal with localized water crisis faced during summer.

Career

MACP:

- I.No. Assistant Engineer(Civil) has got 3rd Financial Up-gradation vide Office Order No. 199 dt.25.02.2015.

Commissioning of Treatment Plant at Swadesh Nagar, Mayabunder



Treatment Plant at Swadesh Nagar was completed and commissioned by people of this area.

Swadesh Nagar and Duke Nagar are old settlement with population of 2653. Earlier water was supplied to these villages with manual chlorination. In order to ensure safe drinking water to rural population construction of Treatment Plant at Swadesh Nagar was undertaken under Plan Head. This Treatment Plant consists of 3 Nos slow sand filter each of capacity 96000 Ltrs. per day and 2 Nos. clear water reservoir with total storage capacity of 2.36 Lakh Ltrs.

Construction of this treatment unit fulfills a long pending demand of people. Increased storage capacity at treatment plant will improve water supply conditions considerably in this area.

Commissioning of Treatment Plant at Pahalgaon, Mayabunder



Tugapur is fastest growing rural area adjoining Mayabunder. Drinking water in the area was supplied to the household with manual Chlorination only. There was long pending demand of people for treated water supply in the area.

Considering these demand work of construction of Treatment Plant at Pahalgaon was undertaken under National Rural Drinking Water Programme of Central Government (NRDWP). This Treatment Plant consists of 3Nos slow sand filter and clear water reservoir with 1.65MLD capacity. Plant was commissioned by people of this area.

This is the first project completed under this scheme which shall benefit about six villages. Another project under this scheme at Webi has also been completed and awaiting commissioning.

Augmentation of water supply at Ramnagar, Diglipur



The existing water supply network at Ramnagar was not sufficient to meet the growing demand of population in the area. Drinking water supply in these areas is from the existing source which is not adequate in summer season. Short fall was being managed by arranging water tanker. Recently augmentation work of existing water supply system was completed by construction of Clear Water Reservoir, replacing of damaged pipeline, laying of additional pipeline, installation of pump and construction of water treatment plant at Ramnagar under CD, Diglipur. On completion of this project safe drinking water is supplied to the general public through an uninterrupted network. The plant was commissioned by people of area.

8Nos. Ty-II Qtrs for GPA at Katchal



8Nos. Ty-II Qtrs. under GPA was completed at Katchal. After Tsunami most of Government accommodation at katchal was completely washed away and headquarter shifted to new location at Mildera.

Government employees faced extreme hardship due to lack of proper accommodation in Remote Island. In order to provide adequate accommodation for government employees posted in these area, 8 Nos Ty-II qtr. has been completed under GPA. It is double storied RCC framed structure designed to resist earthquake loading and provided with all basic amenities conforming to the specification.

C/o Treatment Plant and distribution network at Radhanagar, Diglipur



A Slow Sand Filter bed of capacity 2,70,000 ltr. per day with one Clear Water Reservoir (CWR) of 50,000ltr. has been completed and commissioned by public of the area. 1No. RCC Ring Well of 10 meter dia and dyke, as intake structure was also constructed. 2 Nos. RCC surface tank of 1,36,000 ltr. and a sedimentation tank is also part of treatment unit.

Existing water supply system at Radhanagar Panchayat area was based on Rajaplot source. After devastating earthquake on 26.12.2014 yield of Rajaplot source decreased considerably. During peak summer the short fall was being managed by deploying water tankers to meet the demand of public. 3000 population of Radhanagar Panchayat is benefitted with completion of this scheme.

Office-cum-Laboratory Building for Legal Metrology at Civil Supply Complex, Port Blair



Office-cum-Laboratory Building for Legal Metrology at Civil Supply Complex, Port Blair has been recently completed. This building will provide separate space for legal metrology department which is presently functional in civil supplies official complex. This building has office space for legal metrology officer, waiting area, separate public basic amenities for male and female, and two laboratory rooms. Total plinth area of the building is 485 sqm (Ground Floor - 249. Sqm and First Floor 236 Sqm). Building beautiful exterior finishing make it special and distinguished from surroundings.

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