Odisha is an agrarian state having landmass covering of 1,55,707 sq.kms. The state has a coastline of 480 kms with its eastern border fronting the Bay of Bengal. Water Resources Development in the state was taken up in the late 19th century to curb the destruction effects of water, particularly the devastating floods of river Mahanadi. Large parts of the state continued to remain in the grip of flood and famine in the pre-independence period. After independence water resources development was top priority in national agenda. Water being the state subject, state government was encouraged to invest heavily in hydraulic infrastructure in order to promote growth, mitigate risks and poverty. To face the challenge, first National Water Policy (NWP) was framed in 1987. Following the principles of NWP, the state water policy was framed in 1994, which underscores the need of coordinated approach to the state water resources development. Administrative initiatives were taken to bring all water related subjects under one umbrella in 1994. Irrigation department was restructured as Department of Water Resources (DoWR). In 1996 all irrigation related work departments were transferred to DoWR like-Minor Irrigation (MI) under Rural Development, command area development work by Agriculture Department. Now Major and Medium Irrigation, Minor Irrigation (Flow and Lift) and Odisha Lift Irrigation Corporation etc. are working under one umbrella DoWR. To optimise the utilisation of water by farmers for improving agricultural production and to involve the farmer’s organisations for smooth management of self-owned responsibility for the maintenance of irrigation system, the Pani Panchayat (PP) concept was evolved.

History of PP

In 1972-73 there was severe drought in western Maharashtra. Shri Vikram Vilasrao Salunke, a social activist having Electrical Engineering degree, suggested the Government of Maharashtra to take up water resources development activities, instead of other infrastructure work for employment generation. He organised to establish a charitable trust ‘Gram Gaurav Pratisthan’ with the help of Naigaon villagers of Purandhan Taluk of Maharashtra. He experimented the equitable water distribution with active involvement and participation of local communities. Through this community organisation the movement of equitable water rights, which was popularly termed as Pani Panchayat, spread over Maharashtra. Acknowledging the success of Naigaon.

Pani Panchayat:
A Platform for Rural Development

Dr. Debendra Nath Biswal

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Government carried the concept as Naigaon pattern Vilas Rao Salunke’s concept. The dream of Mr. Salunke transformed the village completely, where once there was poverty, despair and barren lands, there now stands prosperous and plentiful village. His intense study and research work revealed to him that conservation of water and right use of water are required for cultivation of land. It should become the main source of employment generation in the village. He was also confident that his experiment could serve as ‘role model’ for replication throughout the region. For the above, Shri Vikram Vilas Rao Salunke was known as ‘Pani Baba’.

**Pani Panchayat (PP)concept Odisha**

In Odisha, participatory irrigation management by water user group or PP has been strongly expanded with PP Act 2002, and the Odisha PP rule 2003. By the end of 2008, 15500 PPs have been formed, representing an area of more than 1.5 million hectare. Experience from their operation is clearly positive. The PPs are excellent platform for increasing agricultural production and for improved economic condition of the farmers. In Odisha PP status as on 31.03.2015 was as follows-

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Sector</th>
<th>No.PPs formed</th>
<th>Area in Lakh Ha.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Major and medium irrigation</td>
<td>2563</td>
<td>11.25</td>
</tr>
<tr>
<td>2</td>
<td>Minor Irrigation</td>
<td>2650</td>
<td>3.65</td>
</tr>
<tr>
<td>3</td>
<td>Lift Irrigation</td>
<td>19011</td>
<td>4.22</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>24224</td>
<td>19.12</td>
</tr>
</tbody>
</table>

The different acts, rules, plan, policies, guidelines and resolutions are follows-

**Acts**
- Odisha Irrigation Act-1959
- Pani Panchayat Act-2002
- PP Amendment Act-2008
- PP Amendment Act-2014
- The R&R Amendment Act-2013

**Rules**
- Odisha Irrigation Rule-1961
- Odisha Irrigation Amendment Rule-1961
- Odisha PP Rule-2003(Odia)
- Odisha PP Rule-2003(English)
- Odisha Irrigation Amendment Rule-2010

**Plan**
- State Water plan-2004
- Disaster management Plan-2013

**Policies**
- National Water Policy-2002
- National Water Policy-2006
- National Water Policy-2007
- R & R Policy-2002
- National Water Policy-2012

The functions of Pani Panchayats have been defined in the Odisha Pani Panchayat Act-2002 and the Odisha Pani Panchayat Rules-2003.
Some of the important functions of PP are given below:

- To prepare cropping programme considering the soil and agro climatic condition with due regards to crop diversification.

- To prepare a plan for the maintenance of irrigation system in the area of its operation at the end of each crop season and carry out the maintenance works with the funds of the Pani Panchayats from time to time.

- To regulate the use of water among the various pipe outlets under its area of its operation.

- To promote economy in the use of water allocated.

- To assist the Revenue and Disaster Management Department in the preparation of demand and collection of water rates except EC aided projects and L.I projects where the farmers collect water tax among themselves.

- To resolve the disputes, if any, between the members and water users in its area of operation and to raise resources.

- Under World Bank assisted Odisha Community Tank Management Project (OCTMP) Pani Panchayats have been empowered to collect water rate and retention of the same for O&M and take up the O&M of Head works including the distributary system.

**Odisha Community Tank Management Project (OCTMP) PPs**

Government of Odisha in partnership with Government of India and World Bank has undertaken OCTMP in the state has worked for rehabilitation of Minor Irrigation Projects (MIP) and livelihoods of the stakeholders dependent on the irrigation system. The key principles of the project—

- A decentralised setting where the main tank beneficiaries play a proactive role in planning, implementing and sustaining project intervention.

- The tank system rehabilitation work meets technical quality and safety standards and pays adequate attention to social, environment and fiduciary considerations.

- To improve agricultural productivity and farmer incomes, access to improved agricultural technologies and practices and facilitation of market linkages for agricultural producers, are as important as improving access to water.
In OCTMP, the livelihoods activities broadly include improvement in agriculture, horticulture, livestock, fisheries, foreshore plantation and agri-marketing. The indicative activities are:

- **Agriculture** – Augmentation of productivity by technology interventions, introduction of high value cash crops and improving cropping intensity by conjunctive use of water.
- **Horticulture** – Technology interventions on vegetables and fruit crops with focus on market-led production.
- **Livestock** – Breed improvement, nutrition management and health management of large and small ruminants with priority on service delivery.
- **Fisheries** – Technology interventions on short, long and perennial pisciculture with improvement in productivity of water bodies and ensuring availability of quality fish seed.
- **Foreshore treatment** – Regeneration of natural resources coupled with incremental income through fuel, fodder and other inter crops in foreshore areas.
- **Agri-marketing** – Collective input procurement and marketing, establishment of mandi on pilot basis, development of farmers’ organisation (Producers group), infrastructure and capacity building support on selected agri-commodities, ensuring marketing information network etc.

**Outcome of livelihoods development through PPs (case study)**

1. Olgadiajar PP, Karakachia GP, Khunta block, Mayurbhanj district under diversion weir Olgadiajar Minor Irrigation Project (MIP). Before intervention it had 33 ha irrigation facility in kharif only. After renovation and motivation of farmers for agriculture, the farmers have cultivated with irrigation facility in 80ha in kharif and 20 ha in rabi. They have cultivated maize, ground nut, tomato, brinjal, ladies finger. Previously they were harvesting only one quintal maize per acre, but after intervention they are getting 16 quintal per acre. Now the waterbody is having perennial water sources.

2. Sri Lal Mohanta, village-Dalki, under Haridabahali MIP, Block- Sukinda, District
Jajpur, Odisha having Rs.7000.00 income per year, now he is cultivating paddy-5ac in line transplanting, vegetable-1ac, Goatery-12 no. and backyard poultry 15 no Banaraj variety through the help of OCTMP. He has received the certified paddy seeds (swarna and Khandagiri), 50 kg of urea, 35 kg of DAP, 40kg of potash. The yield Paddy -22 quintal/ac, vegetable-40 quintal /ac. The income increased to 1,60,000 per year (30 quintal paddy-Rs.40000, vegetable-Rs.80,000, goat-Rs.40,000).

Conclusion

PPs are developed desirable synergy through the support of OCTMP and line departments like, Agriculture, Horticulture, Fisheries and Animal Resources departments along with market linkages for increasing their income through high production with utilising minimal water. The institutional framework of PP was developed in such a way where a common problem on rural development activities can be addressed amicably. PP is the common platform for agri-allied sector integrated approach in future. The holistic sustainability of rural institutions needs meaningful collaboration and convergence of initiatives taken by government for rural development.