# Annual Report

### 2013-14, 2014-15 & 2015-16



WATERSHED SUPPORT SERVICES AND ACTIVITIES NETWORK (WASSAN)

### ANNUAL REPORT

2013-14, 2014-15 & 2015-16

### VISION AND CORE VALUES

Entrench participatory processes through network approach that strengthen Natural Resources Management (NRM) practices to secure livelihoods of deprived communities in drought prone areas.

**P**articipatory processes include Capacity building, Institutional development, Networking and Advocacy.

#### ✓ Equity

Being sensitive and committed to reduce all forms of discrimination with focus on poor, dalit, adivasi and women

#### ✓ Participation

Having faith in people's knowledge, capacities and their institutions

#### ✓ Collaboration

Developing synergies through networking

#### ✓ Team work

Striving for quality, innovation and diversity

#### ✓ Accountability

With transparency



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### Tribute to Dr. NK Sanghi

r NK Sanghi was a popular personality among variety of people associated with watershed approaches and rain-fed agriculture. He was a reputed scientist and believer in peoples' knowledge and wisdom. He was part of the team that shaped watershed management policies during early 1990s. At MANAGE, he was steering the initial learning programs on watershed management for functionaries from different parts of India and helped them to appreciate new paradigm of participatory watershed management. After his retirement from MANAGE, he joined WASSAN in February 2004. He was guiding WASSAN and supporting all the members with his inevitable charm and enormously positive spirit. He was encouraging all our initiatives, thoughts and unquestioningly agreed with our ideas, strategies and always improved them... He travelled with us to remote parts of the country, encouraged various initiatives of WASSAN. He nurtured several NGOs and their networks and genuinely appreciated their efforts. He enormously contributed to revitalization of rain-fed agriculture; watershed management; groundwater management; common pool of resources and several such themes. He was so fascinated by the collective action of women in Andhra Pradesh/ Telangana in the form of self-help groups and tried to find a reason to engage with them in all possible ways and themes. When WASSAN Foundation was established (as a not-for-profit-company) in 2012, to engage with emerging needs of WASSAN, Dr



NK Sanghi was the promoting director. He was very keen on promoting alternative development finance models and thought that WASSAN Foundation could facilitate such models.

He was a motivator, learner and a strong believer in people's knowledge. He was able to influence various institutions and individuals during his association with his inquisitive enquirers and always encouraged to experiment. WASSAN Foundation brought a publication "Knowledge for Change", In Memory of Dr NK Sanghi". Several colleagues of Dr NK Sanghi contributed to this publication. While writing these papers, they also narrated how Dr NK Sanghi influenced their thinking on that particular theme. K. Suresh, M.V. Sastri, C. Udayashankar and M.V. Rama Chandrudu were part of the editorial team. This publication is a tribute to Dr NK Sanghi by all these colleagues, friends and followers. This book was formally released on 15th September 2015 during WASSAN Annual Network Meeting (ANM) at St. Ann's Generalate, Hyderabad. Mrs Renuka Sanghi released this book and shared the first copies to Shri MV Sastri, Dr. Y.V. Malla Reddy, Dr. J. Venkateshwarlu and Shri. M.V. Rama Chandrudu. The book has 16 papers. Dr. K.S. Gopal, Shri. A Ravindra, Shri. Ch Ravi Kumar, Dr. V. Rukmini Rao, Dr Y.V. Malla Reddy, Dr. J. Venkateswarlu, Shri. MV Rama Chandrudu who authored papers for this publication shared their thoughts during this session. Shri. S.P. Tucker, Shri. C. Udaya Shankar, Shri. Balaram, Dr. K. Sridhar and others shared their thoughts on the contribution of Dr NK Sanghi on various themes including watershed management, rainfed agriculture, women's Self Help Groups, peoples' knowledge systems and so on.

He passed away on 2nd March 2015 at Vellore, Tamilnadu. All his family members were with him at that time and he peacefully departed this world.

All of us at WASSAN dearly miss him....



### Reflections of Experiences

he Compilation of Annual Reports of WASSAN (2013-14; 2014-15; 2015-16) presents the experiences of WASSAN in these three years and also reflections on these experiences. WASSAN's efforts to shape new policies and programs related to watershed management; groundwater; rain-fed agriculture; millets; fisheries; livestock, people's institutions, livelihoods – met with mixed responses during this period. While watershed management programs and policies are finding little support from state and central governments (or a different type of support system); WASSAN's efforts on sectors/ sub-sectors of rainfed agriculture are finding new resonances and partners. All the earlier efforts on these themes/ sub theme are slowly maturing and becoming mainstream programs within Andhra Pradesh; Telangana and Orissa. Through partners of WASSAN, these efforts are likely to mature in other states also, in due course of time.

WASSAN's partnership is slowly extending to corporate agencies and agenda related to Corporate Social Responsibility. Several new opportunities are emerging on this horizon and WASSAN is making conscious movement towards sustainable partnerships with this new partners. WASSAN's efforts to co-construct its own team and organization during 2013-16 met with mixed results. Some of these new changes were accepted and welcomed, while other ideas related to change were rejected. It is a realization that change is not always welcome.

In this compilation of annual reports, one can find a reflection of these experiences, efforts and results of WASSAN.

Best regards,

MV Rama Chandrudu Executive Secretary, WASSAN

May 2016





## Reflections on Watershed Projects - Policy

#### Withering Policy Framework for Watershed Projects?

The Guidelines for Watershed Development Projects issued by Ministry of Rural Development, Government of India in 1994 ushered a silent revolution in rain-fed regions of India. Over a period of time, governments (central/ state) modified the policy of watershed management and influenced the practice on ground. Guidelines for Watershed Development Projects (Revised 2002); Hariyali; Common Guidelines for Integrated Watershed Management (2008) and Common Guidelines IWMP (2011) are part of this process. WASSAN and its partners are actively engaged with this process – witnessing mutely sometimes; influencing proactively; modifying contents; contributing good thoughts; resisting odds; collaborating with like-minded agencies for better policy and practice of watershed management programs in India. WASSAN Annual Network Meetings, collaborations with various state governments; partnerships with large number of NGOs; research/ studies on watershed projects; membership in working groups are some of the instruments for making watershed policy work for poor, for so many years.

Telangana and Andhra Pradesh are bifurcated in June 2014; new governments are formed in several states of India (Jammu Kashmir; Tripura, Andhra Pradesh, Telangana), including at New Delhi during 2013-15. 14th Finance Commission Report is being implemented by Government of India and State Governments. As part of this, funding pattern of several Centrally Sponsored Schemes are changed. Share of Central Government is 60%, while state governments have to contribute 40%. Integrated Watershed Management Projects (IWMP) also have to follow this pattern. It took almost 18 months for the central and state governments to take this decision (Since budget speech in Apr 2014 onwards). Several new schemes are introduced by state/ central governments – Pradhan Mantri Krishi Sinchayi Yojana; Mission Kakatiya; Panta Sanjivini, etc are some of these.

With this backdrop, one wonders whether the sheen of watershed management projects is fading. There are several issues, concerns, gaps, challenges that plague smooth implementation of this flag-ship program, which does not enjoy this status anymore. While the "change" is inevitable, one wonders what is "continuing" with the idea of watershed projects in India.

WASSAN has been following ups and downs of the policy space on watershed management issues and related process in different roles. The consolidated annual reports of last three years (2013-16) presents the reflections of WASSAN in making sense of changes in policy of watershed management in India and influencing the change at the same time.

#### Interactions with Senior Administrators:

The policy on financing development schemes got a new direction under 14th Finance Commission. As per the recommendations of this report, Central government will share higher share of revenues with the states and state governments are expected to contribute higher share towards the centrally sponsored schemes. WASSAN and its partners have organized workshops; small meetings and interactions with senior administrators at central/ state government level to make a representation of the need for continuing support While the policy framework for centrally sponsored schemes is to IWMP. reasonable and sensible arrangement, senior officials associated with watershed management program at central and state governments could sense a danger in this new policy framework for projects like IWMP. As several state governments are not putting their share (apart from 10% mandatory contribution) for watershed management projects so far, they may not be willing to allocate higher share for IWMP. Since these projects are long term; do not produce quick results, this project is not very popular among people's representatives. At the same time, the IWMP was integrated into Pradhan Mantri Krishi Sinchayi Yojana and there was huge confusion on the operating norms, institutional arrangements, etc. During the interactions with these senior administrators at central/ state governments, one could sense that they also could not influence these changes and there was helplessness at all levels on the way the policies are getting shaped up, particularly in the context of watershed management



projects. As state governments changed in several states, the existing senior officers (at state/ central government levels) have to understand the new priorities of new governments and help the ministries to operationalize these new policies.

#### Interactions with People's Representatives:

WASSAN approached several people's representatives (Member of Parliament/ Member of State Legislative Assembly) through variety of means - letters; emails; one to one meetings; small group representations, etc. The main purpose of these meetings was to impress upon these honorable members on the importance of allocating finances/ budgets to programs of national importance such as Integrated Watershed Management Projects by both state/ central governments; and to plead with them the need for retaining the priority of IWMP in the country. While many of them were initially unaware of the total implications of the 14th Finance Committee on state level scheme, they could eventually appreciate this point. However, majority of them thought that state governments should be willing to give priority to IWMP. If a state government is unwilling to allocate funds IWMP, there is no way one could influence this decision - this was the broad conclusion of these interactions. Several members also discussed on ways and means of improving transparency & accountability of these projects. However, people's representatives from Tripura strongly backed up this argument of WASSAN and followed up with the state government of Tripura. All members of legislative assembly in Tripura signed a letter to Honorable Chief Minister, Government of Tripura for allocating funds to IWMP and retaining the importance of the same in state. Similarly, one of the MLAs also wrote a letter to Honorable Prime Minister, Government of India to retain 90:10 ratio for IWMP and other flagship programs in India. Due to these efforts and other similar efforts, all north east states of India still retain 90:10 ratio of funding from Gol. As these efforts by WASSAN were happing during 2014-15, the committees established by Government of India finally concluded to keep 60:40 ratio (central government: state government) for majority of centrally sponsored schemes, including IWMP. From this experience, WASSAN learned that such efforts (reaching out to people's representatives on specific issues like IWMP) have to long-term based and these have to be consistent in time lines and thought/ arguments. Sporadic attempts may not yield any results on such important issues. This is a time consuming agenda and requires several capabilities - coordination; advocacy; research; communication; persuasive skills, financial resources, etc. Engaging with people's representatives is also a new experience for WASSAN, which needs to be further strengthened.



#### Interactions with Academicians, Media and Intelligentsia:

A piece of advice from academicians, media and intelligentsia would go a long way in changing the course of the direction of policy. Considering this, WASSAN approached several well-known development professionals, activists, media groups with a plea that they should join hands in protecting the funding support to important national programs such as Integrated Watershed Management Projects. Dr MS Swaminathanl; Dr Tushaar Shah; Dr Mihir Shah; Dr Mohan Kanda; Dr Nirmal Chander Vij; Dr Raghunandan; Shri Rajendra Singh; Dr S Wani; NDTV; ETV – were some of these members/ agencies. They could grasp the implications of the new policy on rain-fed agriculture and natural resources in drought prone regions of the country and very supportive to this idea. Some of them even wrote letters to Honorable Prime Minister with a request to enhance the support to projects like IWMP, in the interest of national goals. However, some of them also thought that the state governments have to be more informed and educated about the importance of such projects. They also advised WASSAN to explore alternatives to watershed projects, as the state governments may want to promote a new approach for drought and rain-fed regions. Media groups were not able to respond to such efforts by WASSAN. Though they were willing to do, they were always caught up with "breaking news" and/or "headlines". Issues like centrally sponsored schemes are too dry subject for them.

#### Interactions with Civil Society Organizations:

Watershed management projects actually emerged from good practices from civil society organizations. The policy of the program tried to mainstream the experiences on a large scale since 1994. However, several state governments did not engage reputed Civil Society Organizations effectively in IWMP. Several reputed NGOs did not get any partnership with in IWMP, even after demonstrating good practices on a large scale. This is true in Gujarat, Jharkhand; Rajasthan; Maharashtra, Orissa, Karnataka; Tamilnadu, etc. In states like Andhra Pradesh too, initial phase of IWMP did avoid established NGOs. While some of the states like Maharashtra/Karnataka defined a different role of reputed NGOs - a training agency. As the roles of NGOs differed in each state and central government role is almost nil in this matter, the well-meaning NGOs are already out of the government funded watershed projects already. These agencies are also worried about implications of these new policies. During WASSAN Annual Network meetings (2013-15) and subsequent meetings/ workshops, these agencies expressed concerns about the policy trend in the country. However, they could not give top priority to work with the governments; peoples' representatives; other agencies as a "collective" to negotiate better policy and funding support to IWMP. Their priorities are different and many of them in fact thought that it was good to be "out-side" IWMP (government partnership) for all



practical reasons. These NGOs are tired of several issues related to partnership with government – including corruption; delays in fund releases; rigidity in programs; hierarchical relationships, etc. WASSAN realized that well reputed NGOs have already given low priority to watershed management projects and only small/ local NGOs are involved with this project (and many of these NGOs are not necessarily fair and honest). The 'NGO' sector as an agency for watershed projects is broken in to pieces and there is no common voice for the, However, given a leadership and efforts, many of these agencies would come together to lend their support and voice to the advocacy for better watershed management projects. There is also a diminishing space of such collaborative engagements between governments; people's representatives, people and voluntary sector.





### Reflections on Practice

During this period (2013-16), WASSAN's partnership with NABARD funded watershed management projects came to an end. At the same time, partnership with Government of Telangana/ Orissa on watershed management projects is at the terminal stage. WASSAN is engaged with these projects at field level and has been supporting large number of partners through these projects. These partnerships gave an opportunity to reflect on practices on ground. As these projects are also in the fag-end (during 2015-16), it is an opportunity to take stock of these practices on the ground.





### Reflections on Partnership with OTELP Plus

Working with Orissa Tribal Empowerment and Livelihoods Project Plus gave several new experiences for WASSAN. There were several challenges on the path of this partnership, while there are several occasions that are immensely gratifying, since 2011.

#### **Developing Action Plans for the Villages**:

This project gave an opportunity to experiment with planning processes, methodologies and tools for developing the village resources, economy and livelihoods. WASSAN developed action plans for all the project villages, along with partners, that focused on improving rain-fed agriculture, fisheries, livestock, SHG and ISL etc. Based on convergence mode, the funding sources were also identified. This marathon exercise was repeated several times during this period, to the satisfaction of district administration. Based on these plans, District Administration was able to allocate funds for each component of plan. This exercise that innovated on methodology and tools such as Jeevan Rekha was very gratifying experience. Developing community infrastructure (Drying Yard; Chuan Open Well; Utensils; Pond Steps; Multi-Purpose Hall; Storage room, work shed, etc) and economic infrastructure are part of this action planning process. WASSAN provided necessary guidance, advice, training and capacity building support; documentation and technical services in the above process. While the process was exhaustive, the time pressure on the team was also equally exhilarating.

#### Partners and partnerships:

The partners (FNGOs) are grass root level development agencies. WASSAN learned several lessons from them in terms of partnerships. They had huge challenge of keeping/ retaining staff with them. Most of their staff were temporary and could not continue to be with the partner for a long period. Lack of transportation, communication facilities are some of the barriers too, while many project sites are influenced by left extremist activism. This is also one of the big challenges for WASSAN and its partners to retain and manage its team. This imposed great work pressure on WASSAN team. In the absence of staff (on regular basis), the WASSAN team has to perform their roles too, in the interest of the project and save partners from work related pressures from the district administration. Sometimes, the partners were also not able to/ willing to run that extra mile, which is necessary for achieving the goals. This led to tensions and conflicts between WASSAN and partners too. Absence human resource policy and practices that are not in tune with principles of justice are some of the issues at partner's level.

#### Working with Government:

The partnership with district and state administration has very interesting twists and turns. There were several issues of concern and conflicts in terms of agreements on time lines, workloads, physical/ financial targets, etc. WASSAN had to explain several times, why certain targets/ timelines are impossible. Discussions on such occasions were not very pleasant. Over a period of time, WASSAN led consortium is still functional and performing well, while consortia managed by other reputed NGOs are closed. The partnership with government threw a set of complex issues and it is important to be tough at times and be clear about our goals.

#### Livelihoods in Rain-Fed Conditions:

OTELP Plus gave WASSAN and its partners to understand livelihoods of tribal communities in rain-fed farming systems. Based on this, WASSAN could develop several interventions/ strategies and programs for improving food availability, incomes and quality of life of the families in project villages. Vegetable cultivation through trellis method, improved methods of cultivating paddy; fisheries in rain-fed farms; vaccination for livestock; Goat development; Back yard kitchen garden; SRI, Turmeric, Poultry; horticulture; critical irrigation for protecting crops; toilets at home and small tractors. Off farm livelihood interventions like establishing grocery shops; Flour mills for rice and other grains,



cycle shops, Chicken centre's etc. Infrastructure development facilities such as, village drains, internal roads, DBI, hand bore well platforms, Low cost housing for homeless, smokeless chulaas, water filters etc. – all these interventions were part of the plans and programs in this project. Funds from various government schemes such as RKVY, MGNREGS, Department of Animal Husbandry, IFAD Program and others are accessed by actively engaging with district administration/ ITDA. Meeting the targets within the timelines is a major challenge in such projects. As these activities are conducted for three years (2013-16), one could also see that some of these interventions stabilized (due to interest from people and support from administration), while other initiatives died slowly when such support is absent.

#### **Peoples Institutions:**

Women Self Help Groups and their federations are part of the OTELP Plus. Working with backward regions of Odisha and tribal women, WASSAN realized that these institutions need much longer support from the main stream systems such as banks, government schemes, etc. The culture and purpose of these groups could also very different from other similar SHGs and their federations. But a standardized model gives limited scope for institutional innovation and it is likely that the SHGs and Federations of SHGs in the district may work at subcritical level, given this constraint. The partners NGOs of WASSAN also have limited experience and commitment to this agenda. This is an agenda that requires considerable efforts and commitment from facilitating agencies. Mere registration and formation (opening a bank account, etc.) does not serve the purpose.

#### **Bilateral Projects**:

While Central/ state governments have specific programs and investments on a variety to themes, bilateral projects/ agencies bring certain innovation in the normal programs. However, when these projects are entangled in administrative hurdles, protocols, they may lose their charm. In such cases, the funds from such projects serve limited purpose. In case of associated between OTELP Plus and IFAD, WASSAN team got a sense that the 'top-up' from IFAD could have been better organized in terms of time lines; program design and delivery mechanism. There was considerable haste in completing this program during this period, as most of the allocated time was unutilized for program. One gets a sense that this is a missed opportunity.

#### **Building Capacities of Communities:**

WASSAN conducted several training programs, exposure visits, demonstrations and workshops for the communities in the selected villages of Malkangiri District, as part of OTELP Plus. These programs focused on perspectives, skills and project related task/ roles to be performed. These efforts could certainly prepare the communities for perform project related tasks and helped them to improve their assets, incomes and production systems. However, there is a need to sustain their efforts to be on their own, in the markets; production technologies, financial aspects and also general issues such as education, health and culture. Can a project like OTELP Plus be comprehensive to all such needs of communities? Can there be a program/ effort to build the capacities of communities on these matters? – This is the challenge for a resource support organization like WASSAN, which aims at building capacities of communities.

#### **Convergence in Practice**:

OTELP Plus is largely based on principles of convergence. Action plans are considered to be instruments in making this a reality. The efforts made by WASSAN and its partners to develop action plans for convergence based plans could produce useable action plans. However, there were huge delays and coordination problems between departments and communities. Many action plans are found to be redundant, when there is no timely action by each member/ agency, who are connected to this action plan. This led to considerable distress among the communities and also among the facilitating agencies. Whenever, district administration (District Collector and ITDA Project Director) are active, these action plans could have implemented to a great extent. But, these incumbents change very frequently and there are several time lags. When there is delay in implementation, state level officers are also unable to support field level action. On the contrary, they also blame Field based organizations and Resource Support Organizations, for delays. This is a strange paradox that one is trying to live with.



## Reflections on NABARD Funded Watershed Fund Projects

Since 2007, WASSAN is functioning as Resource Support Organization for Watershed Development Fund projects, which are funded by NABARD. These projects are being implemented to address the agricultural distress in the states of Andhra Pradesh and Telangana. WASSAN is actively working in Mahaboobnagar, Khammam and Adilabad under this initiative. NABARD has selected 23 Project Facilitating Agencies (PFA) and sanctioned 81 watersheds with an area of 91583.62 ha in Adilabad, Khammam and Mahaboobnagar districts. All watersheds are graduated in to Full Implementation Phase (FIP). Status of the watersheds as follows. This project is almost in the final stages by Mar 2016. Few more formalities are being completed to formally close this project. As a Resource Support Organization, WASSAN provided necessary capacity building support and guidance to partners during various stages of the project planning, implementation, etc. WASSAN provided hand holding support on technical and managerial issues of the project at all stages of the project. This experience with NABARD funded WDF projects gave a big mileage to WASSAN as a resource support organization in the country. Some of the key reflections on this project (which is nearly getting completed) are mentioned here.

#### Strong Project Management Systems:

NABARD evolved a strong project management system for the WDF projects. This system evolved over a period of time and contextualized for the requirements of Andhra Pradesh/ Telangana. Action Plans are considered as sacrosanct and any deviation requires considerable protocols. The reviews also take place rigorously and basis for review is action plan. Sometimes, these revisions take long time and there are several steps involved in this process. Sometimes, it appeared that there is little life in the project document (FSR) and one should somehow implement it.

#### Financial Entanglement:

The payments to WASSAN for providing services as a Resource Support Organization were made against the milestone crossed and project outputs produced. This arrangement is perfect when all the actors are prompt and there are no delays. However, in a project like watershed management, where there are several delays and gaps (due to various reasons), WASSAN has to advance to the project all these years (Since 2007 to till almost the end of the project in 2016). This advance ranged from Rs 10 lakhs to Rs 60 lakhs per year. NABARD made payments only after the mile stones are crossed and only when all formalities are completed. This created considerable financial strain/ burden the organization. Though WASSAN made several representations to NABARD for changing this norm and also increase the budget allocation (as every other component in the project got revision), this did not take place. It is important to negotiate with donor on the system of payments and ensure that there is financial burden on the organization.

#### **District Officers Focused**:

District level officers play an important role in steering the projects of WDF. Depending on their educational background/ professional orientation, these officers steer the project at district level. With their collaboration, several innovations could take place or they could be a potential block in the program too. WASSAN has experiences of both categories. Sometimes, certain components got unexpected support and in some other cases, certain ideas/ proposals could not get support.

#### **Opportunities for Innovations**:

The capacity building budgets at Village Watershed Development Committees could be utilized for conducting crop water budgeting, exposure to successful Farmers Producers Organizations/ enterprises and other similar learning events. Similarly, WASSAN was able to advocate/ influence the district and state level



officers of NABARD to consider newer ideas such as promotion of millets, System of Rice Intensification; dairy; poultry, fisheries, wood stoves; etc. within watershed program. Though this opportunity existed in the project, WASSAN had to initiate each idea and follow up the entire cycle with utmost care so that the idea is matured to action. It may be noted that several ideas/ program components got introduced by only WASSAN, while other resource support organizations could not utilize this space. They largely limited themselves to supporting the partner to implement soil & moisture conservation activities. WASSAN takes pride in pushing several innovations within NABARD funded WDF projects. As low cost structures like CCGB (cement concrete gabion) and check walls could harvest water, many farmers observed that water table has been increased in the bore/open wells. Cultivating redgram and vegetables in the pits, field bunds and farm pond bunds was another innovation in these project villages.

#### Water Conservation to Water Management:

The theory and practice of watershed management are constantly evolving. Initially, watershed projects had almost exclusive focus on water conservation. It was assumed that people would somehow "manage" augmented groundwater. However, it is soon realized that the water management which includes - regulated use of water; promoting appropriate cropping pattern, allocations/ access of water to farmers who do not have access to water, etc. are to be part of watershed management. However, this aspect of the watershed projects is more complicated than construction of check dams/ farm ponds, etc. So most of the watershed projects in WDF also focused more on water conservation and to a very limited extent on water management. After several efforts by WASSAN, there was a window of opportunity at the end of the project. The capacity building budgets of VWDC were utilized to conduct crop water budget exercises and this led to important realization at the farmer level on importance of water regulation; appropriate crops; sharing of water within the village; knowledge about groundwater issues, etc. Based on these efforts, few VWDC members in Adilabad established water sharing grids within their villages. For doing this, they borrowed money from livelihoods funds of watershed project. This is one of the important achievements of this projects. Similarly, few hundreds of farmers also switched over to less water consuming crops, as this is more beneficial to them. Such water management practices need to be included into the watershed management projects. Experiences of working with NABARD funded WDF indicate that this integration is possible when there are significant efforts by WASSAN. Otherwise, most of the watershed projects stop at water conservation.

#### **Fisheries in Watershed Management Projects**:

When water bodies are able to retain water for longer periods, there is a possibility of increasing the benefits of such water body, such as promoting fisheries in these ponds. When rain fall is high and when there is impervious geology, small water bodies could also become ideal sources for fisheries. In WDF projects, WASSAN was able to promote fisheries in farm ponds and other water bodies. This was not only providing additional income to the farmers, but also providing nutrition to the family. Investment required for this intervention came from watershed projects in the form of loan and subsidy. There are several farmers now, who have multiple benefits from the farm ponds. This is another interpretation of "more crop per drop".

#### **Efficient Woodstoves**:

Majority of the rural families depend on fuel wood for cooking. They collect fuel wood from their own fields, forests, common lands and other places. Though every family seems to have abundant supply of fuel wood, there is also increasing stress on forests, farm lands for fuel needs. Apart from this, the traditional stoves are not very efficient in terms of energy use and create considerable pollution in side homes. WDF project promoted wood stoves in the project villages. These stoves are more efficient – can cook food with about 50% of fuel wood (in comparison to traditional stoves); save time and reduce smoke. During this period (2011-2016), about 5000 stoves are promoted. Women in the villages loved these stoves. This intervention is simple and very impressive in its results.

#### Loan Based Interventions in Watershed Projects:

While majority of the components in watershed projects (water conservation; soil conservation, etc.) are subsidy based interventions, there are also few other components that are loan based activities. Livelihoods and production based programs are generally loan based programs. For operationalizing this component, action plans are developed, eligible members are identified and loan recovery norms are established. VWDC takes the responsibility of issuing loans and recovering the same. While this is an important component of the WDF project, the institutional arrangements for this loan based components are yet to be evolved. It is found that VWDC do not have necessary skills, orientation and time to manage this fund (and manage loan based development). In fact, some of the VWDC members themselves borrowed from this and did not repay to VWDC. In some cases, (particularly in Khammam), Cooperatives established at the village level borrowed money from VWDC and started managing this fund, efficiently. The cooperative pays interest to VWDC too. It is important to realize that loan based development requires a different type of institution, while



subsidy based development requires a different type of institution. In case of loan based institutions, it is important to build the loan based institutions on discipline, financial integrity and self-generated funds/ savings. External agencies should not disturb this culture by giving excessive funds/ grants. Even in case of highly disciplined institutions, it is important to monitoring the use of external funds. There are serious concerns in the minds of partners on the efficacy of VWDC in managing the funds that they got from NABARD for livelihoods. Some partners (particularly in Mahabubnagar) are strugaling to ensure that the loans are recovered under livelihoods components. When governments issue acts that prevent loan recovery processes (which could be projected as harassment), several NGO members are hesitant to take any such responsibility of loan recovery. During recent elections, loan recovery was also one of the promises of political parties. With this backdrop, the loan based interventions need to withstand several odds - willful defaulters; protection to borrowers against harassment related to loan recovery; selfish mottos of leaders of the villages; diminishing public/ institutional finances to livelihoods, NGOs who are hesitant about the loan recovery protocols, etc.

#### Converting Watershed Committees into Farmers Producers Organizations:

Village Watershed Development Committees are main responsible for implementing the watershed development projects at village level. They opened a project account and deposited the project grants into it. They also opened another bank account for depositing the people's contribution. The funds under livelihoods promotion are also with these committees. While the project implementation is coming to an end (by 2016), WASSAN initiated the dialogue with NABARD on the sustainability and continuity of these institutions. During WASSAN Annual Network Meetings, special sessions were organized on sustainability of people's institutions and how some of the institutions promoted by NGOs are already going beyond construction of assets. Meanwhile, there was an initiative by Government of India/ NABARD/ Others to promote Farmer's Producers Organizations. In tune with this trend, NABARD decided convert all the Village Watershed Development Committees into Cooperatives of Farmers under Mutually Aided Cooperative Act. This decision was taken during 2014 and process was initiated by all partner NGOs. Though there was adequate time for this process, several partner NGOs could not pay much attention to this agenda for three reasons – a). Some of the pending construction work was still going on, which took considerable attention/ time of the NGOs; b). They did not have adequate orientation, capacity, inclination and human resources for crafting the cooperatives of farmers; c). NABARD provided cursory support to this agenda, as the process is expected to be taken care of, by NGOs. Several aspects of promoting these FPOs could not be attended to. So, by the end of



the project (2016), these people's institutions (Farmers Cooperatives) still remain like an unfinished agenda under WDF. While there are few role model villages/ cooperatives, large number of cooperatives need to find their feet membership; developing bye-laws; creating financial muscle through share capital/ other means; developing business plans; offering services to its members - are still a distant vision for these nascent institutions. As the cooperatives members were erstwhile members are VWDC members (who are used to receiving arants and spend them), they need to re-orient themselves from arant based programs to credit based programs. This is a major challenge for the promoting NGOs and also farmers. There are limited capacities to pursue these matters in a systematic manner in the NGO sector at this point of time. As the watershed villages/ committees have financial resources (livelihoods funds; maintenance fund; people's contributions), the cooperatives and committees in these villages have to find a common ground and also delineate their roles separately. WASSAN made several efforts to sensitize NGO partners and also NABARD on the need for looking at this agenda more systematically and nurturing this. Typically, both of them were busy with other priorities and could not spend necessary time on this issue. WASSAN is serious about this gap in the program/ strategy and intends to work with like-minded partners on this agenda in future.



## Reflections on Indo-German Watershed Development Projects

WASSAN is functioning as Resource Support Organization for IGWDP since (2007-2015). This project was a bilateral project was supported by NABARD and KfW. This was implemented in Karimnagar, Medak, Warangal and Adilabad. WASSAN is responsible for Karimnagar and Adilabad. This project is expected to be a bundle of innovations that could teach lessons to other watershed management projects in the state/ country. This project lived up to this expectation as there are financial allocations for taking up any innovative steps and also flexibility in the project. As RSO WASSAN was able to support its partners in the following areas of innovation.

#### **Fisheries in Watershed Projects**:

Earlier, IGWDP supported KVK Jammikunta to establish a fisheries resource center to support/ nurture this initiative. WASSAN supported KVK Jammikunta to perform the roles of resource support organization on fisheries, during this stage. However, this resource center slowly withdrew from this initiative, after the project support was closed. Considering the need at the field level, WASSAN deployed fisheries expert from its team, to provide necessary support to partners. Entire value chain of the fish production was supported under this initiative. This team extended support to partners under IGWDP and WDF also, at critical stages. This initiative demonstrated how focused attention could make a difference at the field level. (Please refer to this theme which is already explained earlier).

#### Crop Water Budgeting – A New Beginning:

Under this initiative, WASSAN conducted Crop Water Budgeting Exercise in IGWDP villages. As part of this initiative, WASSAN teams facilitated a community level exercise where water resources are audited in the watershed villages. The quantity of water that is harvested through various water conservation practices; the quantity of water that is utilized for agriculture/livestock/drinking are jointly estimated systematically, by local communities and WASSAN team. Number of pumping hours of each crop/ acre in each village are estimated and its income is also estimated. This exercise helped to assess the levels of incomes from different crops per hour of water use. Apart from this, the status of water in the village (surplus or deficit) are estimated in the village. Based on this exercise, villagers realized the need for conserving more water. They also recognized that mere conservation is not adequate and they should also shift to crops that require less water and give higher incomes. They also discussed on how to reduce water use and improve water use efficiency. This exercise in IGWDP villages triggered some more action on pilot basis in these villages - water sharing by developing a grid of pipelines that connects private bore wells. While conducting this exercises and looking at the response of the farmers, WASSAN realized that this could be a starting point of the watershed projects. This helps the farmers to reflect on the status of water resources in the village and necessary action on the management of the same. The watershed program could be designed very differently, if this exercise is front-ended.

#### Groundwater Pooling in Selected Villages:

In response to Crop Water Budgeting, groundwater pooling pilots were initiated in few villages that came forward to share water with each other. WASSAN provided support services to these villagers'/ NGO partners in promoting a grid of pipe lines to connect existing private bore wells and putting outlets at various locations along with sprinklers. These plots consist of 40 to 140 acres of land. Farmers who own bore wells agreed to share water with those farmers who do not have borewells. Each group developed its own norms and agreements on water sharing. This helped the farmers who do not have borewell to access water. This also gave confidence to bore well owner farmers that their bore well is protected as there would not be any new borewell for at least 10 years (as per the agreement). The borewell owners thought that the water is supplied through pipelines, without wasting and the equivalent of this water could be shared with others, who do not have borewell. There were several such thoughts among the



borewell owners and farmers without borewells. The result that one could observe is – water is available to more farmers; cropping systems are in tune with water plans; there is more income and diversity of crops, which is in tune with in rain-fed conditions. All farmers (irrespective of borewell ownership) could protect their kharif crops during critical stages of the crop cycle (when there is dry spell) rand this helped to retain the productivity of crops.

#### Dairy in Watershed Villages:

A good watershed development project would have obvious positive impact on livestock. It is observed that fodder availability increases because of the water/ moisture in the soils, better agriculture, more land under agriculture and better health care & water facilities in the village for livestock. In IGWDP villages in Karimnagar too, these trends were observed. Looking at this trend, IGWDP/ NABARD facilitated several actions that further strengthened livestock sector in these villages. These include – cadre development (health workers for livestock/ dairy sector); credit line/ matching grants for farmers from on-going government schemes and NABARD credit plans; linking the villages (dairy farmers in these villages) with district dairy and so on. These efforts are unique to watershed projects in Karimnagar district. About 83 farmers are part of this process and they could establish local dairies and send milk to the district cooperative. Each farmer has 2 dairy animals (on an average) and earns 200/- to 250/- Rs/Day.

#### System of Rice Intensification:

Paddy is one of the most commonly demanded crop in rural areas. Apart from being staple food, it also offers basic financial return to the farmers. However, paddy is not really suitable for drought prone areas, as it is water guzzling crop. It is a common scene in drought prone regions that bore wells get dried up, when the pump water for paddy crops. Though it is not desirable for drought prone regions, farmers tend to cultivate it, if they are sure of groundwater. When watershed projects are completed, they had good and positive impact on groundwater. After seeing the augmented groundwater, farmers tend to grow paddy. This is a paradox that could lead to depletion of groundwater resources, making watershed projects a short-lived success. Given this complexity, WASSAN promoted System of Rice Intensification (SRI) method of cultivation of paddy. About 8 farmers started cultivating paddy using SRI method in 9 acres of land, 2 villages under IGWDP. This process was initiated in 2009-10 and since then it is continuing. This required additional facilitation costs, tools/ equipment and training for building a cadre of local laborers, who specialized on SRI cultivation (transplanting as per required spacing; weeding with the support of specially designed weeders and other agronomy practices). IGWDP provided this support and WASSAN team provided necessary support to partners and villagers for this process. Now the groups of farmers are able to cultivate paddy under SRI



method and save water (up to 20%) and also have higher yields. It is a rare scene where a patch of land with 320 acres of land (320 acres in Kharif and 150 ac in Rabi) with 250 farmers (who are in the same patch) in 3 villages, following this SRI method of cultivation for consecutive years/ seasons, since 2013 onwards. 5 to 6 quintals/acre additionally produced in these lands each seasons. Five skilled labor groups are formed in 3 villages; each group consists of 10 to 12 members. These labor groups helped to sustain the SRI practice and make the life of farmers easy.

#### **Mixed Cropping – Promoting Diversity in Agriculture**:

Traditionally, several villages in Telangana cultivate millets, pulses and other fodder/ tree based crops. There was limited area under paddy and other commercial agriculture. However, this changed over a period of time. Large areas of agriculture land are now under mono-crops; commercial crops (cotton; maize); water guzzling crops like paddy. This led to depletion of groundwater; reduction in soil fertility, yields and lower incomes. Apart from this, cost of cultivation also increased. For several of these problems, there seems to be one solution - diversity in crops/ agriculture. Under IGWDP, WASSAN consciously promoted mixed cropping systems; diversified cropping systems; inter-crops. The advantage of these practices are multiple – there is low demand for water; they could resist dry spells and withstand droughts; multiple outputs during the entire year (majority part of the year); soil conditions improves; income and nutritional security of the farmers. Based on this approach, WASSAN worked with partner agencies on this agenda and motivated 354 farmers to switch over to mixedcropping system in 484 villages. These efforts included – supply seeds of different crops (reintroduce these crops); organizing training/ demonstration of crops; collection of seeds from these demon-plots and developing a system of seed sharing (seed village/ seed bank/ seed exchange), etc. Over a period of time, some of the villages have a complete transformation. Mallapur village in Adilabad is one such example, where 70 farmers now consciously practice diversified agriculture. This village is attracting several visitors - farmers, policy makers and researchers as they find this village is teaching a new lesson to the drought-management. The challenge is to replicate such models in entire watershed management projects. WASSAN had to confront resistance, hesitation and non-cooperation from partners, decision makers of IGWDP and farmers, during the initial stages of this initiative. This idea gained support and strength after crossing certain mile stones by individual farmers (who wanted to experiment and take some risk) and WASSAN. Looking back, it is worthy of those efforts by WASSAN in promoting diversified agriculture (mixed crops) in watershed villages.

#### **Contour Cultivation**:

Watershed is typically a sloppy land, sometimes with multiple slopes. Farmers tend to plough the land along the slopes, as it is more convenient. Though this is a traditional practice, it could lead to considerable soil erosion and degrade the land. This could be prevented by taking up cultivation (ploughing and growing crops) along the contours of the land. This is not generally followed by farmers as they find it difficult to operate. Under IGWDP, 234 farmers were encouraged to cultivate crops following contour cultivation. This practice demonstrated that soil erosion could be prevented and there is moisture at the root zone of the soils, as the ploughing along the contours. Due to this, the crop yields are also found to be good. This required considerable effort from WASSAN and its partners to motivate the farmers, to change their agronomical practices.

#### Conserving Water with Sand Bags:

When stones are not locally available/ too expensive, san bands are used to harvest rainwater. This practices is relatively more popular in Maharashtra. In IGWDP (and also in WDF) villages, water harvesting structures are constructed with sand filled bags. To make the sand solid, 5% to 10% cement is also mixed with sand. This helped to minimize the cost of construction in these localities and conserve rainwater. This method was followed in 2 districts and 17 structures were constructed with this method. There would be leaks (from the gaps between these bags) initially. However, these gaps get filled with soil and the structure becomes impervious over a period of time. This technique is relevant where stones are not abundant and streams are of first/ second order.



## Reflections on Integrated Watershed Management Projects

Since 2011, WASSAN is functioning as Project Implementing Agency (PIA) for two projects in Ranga Reddy district, Telangana. These projects are in Parigi and Doma mandals. Though WASSAN is a resource support organization, WASSAN agreed to function as PIA for these projects, to gain first-hand experience of 'implementing' watershed projects. While this experience helped to enrich the profile and improve the sharpness of WASSAN's thought and action, there were several challenges too. This section of the report presents the reflections of WASSAN as an implementing agency for promoting watershed management.

#### **Establishing Climate Information Centers:**

WASSAN was able to interface with SLNA, Government of Telangana and establish Climate Information Centers as part of Entry Point Activities. These centers have computers with internet, public display, and public announcement



systems. WASSAN developed a special software on agriculture which is menu driven. This software is uploaded into these click centers. These centers are run by a cadre of young local professionals. These are trained by WASSAN. When these centers are embedded into any local institution that could also generate revenues, these CLICS could run without much external support. However, there is a need to continuously nurture and hand-hold these centers to be effective. WASSAN is advocating to the Government of Telangana to adopt these CLICs as part of Grama Jyothi program, where there is a proposal to establish rural computer centers. It is likely that these CLICs would be eventually be converted into Grama Jyothi Centers in these villages. Other activities in entry point activity category were also very diversified and helped to address the felt needs of the communities.

#### Integrating Groundwater Management Principles in IWMP:

WASSAN is promoting Participatory Groundwater Management principles in IWMP villages. As part of this WASSAN develop action plans that are inclusive of groundwater maps, details of hydro geological features (recharge zones/ discharge zones); and appropriate sites for water harvesting s structures. WASSAN also conducted Crop Water Budgeting Exercises in these villages with the support of Arghyam. Though support from IWMP is available for this component, accessing this budget was almost a nightmare (in terms of software related protocols; etc.), this could not have been conducted without Arghyam's support. These exercises helped to identify gaps (opportunities of conserving more water) and also take certain steps by farmers in changes in crops (shift to low water consuming crops). Monitoring wells are established in these villages and groundwater levels are collected regularly with the support of Arghyam support. This data base was useful in conducting the crop water budgeting exercises. The actual implementation of some of the water conservation activities could not be taken up as there is no fund from IWMP/ MGNREGS for last two seasons. However, with the support of Azim Premji Philanthropic Initiatives, a group of farmers in Ratna Naik Thanda could develop a water grid of private bore wells and started sharing water with each other. This process is expected to ensure good yields of kharif and rabi crops of all the farmers in this grid, even if there are dry spells.

#### Focused Attention to Some Critical Issues:

As part of IWMP, some of the critical issues of farmers in the watershed villages are addressed. Some of these experiences are briefly mentioned here.

Boulder Removal – Creating New Lands: Several plots of agricultural lands in Doma and Parigi are filled with big boulders. As a result, these



lands are generally unfit for agriculture. As part of IWMP, boulders were removed from 2362 acres of land of 2361 farmers. This enabled to them to utilize this land. Though this land requires further leveling/ ploughing, most of these farmers are able to utilize this land and improve their agricultural incomes.

- Fodder for Livestock Incomes for Farmers: Fodder shortage was one of the critical problems of the villagers. As part of IWMP, 321 farmers got support to cultivate fodder in 321 acres of plots. This ensured that these farmers have solved one of the problems and started nurturing their livestock and got better incomes. The cattle troughs in each villages (which were established as part of entry point activities) also helped to solve the water problem for livestock. The vaccination camps organized during 2014 with the help of Department of Animal Husbandry also helped to address the mortality of livestock. It is important to organize these camps each year. As a result of these efforts, livestock population and livestock based economy improved in these villages.
- Water Harvesting Structures: Farm ponds (48 Nos), check dams (33 Nos); check walls (5 Nos) and mini percolation tank (1 Nos) and percolation tanks (4 Nos) were constructed in the project villages. However, due to severe drought and dry spells in last two years (2014-15; 2015-16), these new structures could not harvest any rain water and could not be filled. The real impact of these new structures would be visible only when there is rain.
- Agricultural Equipment: Several agricultural equipment sprayers; oil engines, cycle weeders, etc. are supplied to villagers. Convergence with Department of Agriculture was also mobilized for these interventions. Village Organization played an important role in identifying the recipient of this equipment. This person is expected to hire this equipment to other farmers and ensure that these equipments are properly maintained.
- User Groups and Cooperatives: During the initial phases of the program, about 320 user groups were formed. Majority of these groups started functioning as thrift and credit groups. They also opened bank accounts. However, they could not get any matching grants from the IWMP due to policies of Government of Telangana in case of IWMP. Some of these groups got disintegrated because of this reason. However, About 450 farmers and their groups are now seriously pursuing to form a cooperative at mandal level. WASSAN team is now

facilitating the process of promoting Cooperative of Farmers in these two mandals.

#### **Selection of Area of Watershed**

As most of the watershed areas were already "treated" in previous projects, the ridge areas of the current project villages are not technically available for treatment now. As the extent and quality of these treatment is weak; there still considerable erosion from ridge areas, which could not be taken up. Similarly, the project site has streams that are of 3rd order and above. These streams need higher investments for harvesting water. There are also large number of water bodies/ chain of tanks. Apart from these streams; there are very limited active gullies in the project area. The slope is also gentle in the villages and there is limited demand for earthen bunds/ soil erosion control works. The project also has 10 to 12 villages and each village is partially covered under earlier works. This created a complex situation at the village level for developing the action plan and also execute them. This also implications on the administrative cost of the project (too many visits; too many village level functionaries and related expenditure). Over a period of time, WASSAN engaged one field worker (watershed assistant) for a cluster of villages to maintain the expenditure within allowable budgets. The honorarium was also paid against performance/ targets achieved

#### Action Plans and their Implementation:

For developing Detailed Action Plans, WASSAN team serious efforts to engage communities and developed demand driven action plans. WASSAN tried to integrate geo hydrological aspects of the local watersheds also. However, many of these activities could not be implemented. As soils are light, villagers demanded tank silt application. Though is initially allowed under MGNREGS, this was soon discontinued as the administration could not supervise the same without malpractices in the Mandal, where WASSAN was implementing the IWMP. So these activities are not taken up. Similarly, farmers wanted several types of water harvesting structures (farm ponds; check dams, etc) and demand was generated for these activities. However, for each type of activity, there is a limitation/ constraint. There is a restriction on the length of the check dam. Above this length, check dams are not allowed. Similarly, there is restriction on budgets for repairs of check dams. There are limited opportunities for site specific designs/ estimates. After generating demand for farm ponds by considerable efforts, the patch that allows farm ponds was removed from the list of activities. These experiences led WASSAN team in disparate condition and WASSAN has to explain to communities about these restrictions, which did not make sense to them.



### **Slow Progress and Delays in Funding**:

During the initial phases of IWMP, WASSAN team took time to develop rapport with the communities; developing action plans; entry point activities, etc. There was also staff turn-over during this phase. When these issues are settled (between 2011 and 2012), the project was poised to execute the works since 2013. However, the fund releases were a major challenge since 2013 onwards. With consistent effort and struggle, WASSAN reached to top position in terms of expenditure in the district, without compromising on people's contribution and other principles. However, this tempo could not be maintained as the fund flow to these projects almost stopped since 2014 onwards. 2014-15; 2015-16 saw very limited work, while villagers were ready, systems are stabilized and initial efforts produce impressive results on ground. The fund delays are due to confusion about the funding pattern for IWMP (14th Finance Commission and its influence on IWMP).Currently, about Rs 20 Lakh expenditure is made by user groups and WASSAN is unable to make payments to these works. This is a challenge for any implementing agency to retain the staff, while there is not work on the ground/ there are no funds for works and programs.

### Software Applications in IWMP – Facilitator or Rigid Framework?

Government of Telangana already developed software for Mahatma Gandhi National Rural Employment Guarantee Scheme, which enables to conduct several tasks of the project, including planning, payments, monitoring, etc. The same system is applied to IWMP also. This program helped the project teams to plan, execute works, monitor the progress and transfer funds (payments, etc.). There is considerable transparency and efficiency in the project management (including fund management). There is also a concern that there is no flexibility of the project and there is very limited space for innovation. As the project framework allows only "certain" tasks/ item, other locally relevant tasks/ activities could not be taken up easily at the local level. Though there are efforts to include any new "patch" as per the local needs, many PIAs/ field staff including WASSAN team could use this space/ opportunity to improve flexibility in the software and its applications, as it is long drawn process. Several components in DPRs could not be implemented as there is no relevant patch or the works are not allowed in a particular season, when people wanted to do that work. This software application led to considerable centralization in decision making, delays in payments in the project management, which is against the principles of participatory watershed management. As an implementing agency, WASSAN could not influence much on this complex issue.

### Capacity Development – Still an Elusive Agenda?

Watershed development projects are unique in several ways. This is the first rural development project in India that has inbuilt budget for capacity building purpose. However, there is a huge gap in designing the capacity building service delivery mechanism for the project. As a PIA, WASSAN could not conduct several training programs (as per the plan), even after administrative approvals. Even as an advocacy/ network group, WASSAN made several attempts to open this space along with other NGOs. However, this idea also did not move forward as the unit costs are too little for resource persons (from other NGOs). The budgets for this purpose are not released and WASSAN could not organize several capacity building related events, which is a disappointment. As these training programs and related protocols (documentation; participants lists; attendance of participants, etc) are too tedious to work with. Since the budget is also reimbursed against expenditure, there are several issues related to this system. The protocols of training programs are "made difficult" to ensure that a sincere and well-meaning implementing agency like WASSAN is just unable to access this fund.

### **Convergence – Reality or Myth?**

Government of Telangana has evolved several operational policies/ practices for facilitating convergence between IWMP and other departments. Prominently, MGNREGSfunds are converged by clearly delineating project activities between IWMP and MGNREGS. As same department is handling these two projects/ schemes, the software helped to ensure this convergence and also avoid duplication. However, MGNREGS programs are almost decided at state/ district level, without any relevance to IWMP/ DPRs. The mismanagement of MGNREGS (particularly tank de-siltation) created several hurdles in the process of implementing IWMP for WASSAN. These issues could not be resolved even after two or three years. Similarly, the livelihoods funds of IWMP are allocated to Village Organization of women self-help groups. As these groups are nurtured by Society for Elimination of Rural Poverty (SERP, a government promoted society), SERP is responsible for this agenda and funds. It is observed that the funds allocated for livelihoods are not necessarily efficiently used by SHGs and there are several problems with this agenda including - mismanagement of funds at village level as SERP staff is not able to provide adequate time/ support; in several places, Village Organization is dysfunctional; SERP staff is not fair in their functioning and encourage malpractices. WASSAN team has limited say/ role in the management of this agenda.

### Inability to Take Forward Other Experiences into IWMP:

WASSAN's experiences in other sectors (fisheries; millets; livestock, land rights, convergence and other issues) could not be seriously integrated into IWMP for three reasons – a). The IWMP framework (particularly software enabled systems) is too rigid to operate and several efforts by WASSAN on these matters met with limited success; b). IWMP team is too preoccupied with IWMP related protocols/ systems/ government administration/ meetings and had very limited time beyond that. Apart from that, there was also turn over within this team, which could not help the project to stabilize for a long period. c). Other experienced members of WASSAN were too busy with other commitments/ priorities on hand and had limited time for IWMP at Parigi. These issues could be addressed to some extent, in limited number of cases, which produced good results. In other cases, it was a missed opportunity.

### Other Initiatives in Livelihoods Resource Center, Parigi:

Similarly, Crystal Drops Project is being implemented in these villages since Oct 2013 with the support of HSBC, which focused on WASH services. Another initiative related to "Clean Development Mechanisms' was also initiated in these villages with a focus on biogas/ energy efficient wood stoves, during 2014. The first phase of this initiative was to get registered under Gold Standards for potential carbon markets. While the implementation programs like these, offer a variety of exciting opportunities, they also offer a set of challenges



# Reflections on Support Services to Other States on IWMP

WASSAN has been working with several state governments and supporting them on watershed management projects. During 2013-16, WASSAN and WASSAN Foundation offered support services to State Level Nodal Agencies in Tripura; Manipur; Madhya Pradesh; Chhattisgarh; Jammu & Kashmir. These support services related to – technical and capacity building support for developing Detailed Project Reports; conducting preparatory phase assessment; works phase assessments; offering training/ capacity building support services. There are very exciting experiences in this partnership, at the same time there are also several disillusions.

### Partnership with SLNA Tripura:

Partnership with SLNA Tripura since 2013 in in a declining mode. The initial phase of partnership (during 2010-12) was intensive. Based on the support services from WASSAN during that phase, SLNA Tripura could quickly gain the top position in North East and also in India, in terms of project progress (crossing all important mile stones/ expenditure/ physical targets/ other issues). During 2013-16, the need for WASSAN's support to SLNA Tripura was minimal in planning related agenda. However, WASSAN and WASSAN Foundation conducted evaluation of

IWMP projects for the preparatory phase and also works phase during 2013-16. The works phase evaluation conducted by WASSAN and WASSAN Foundation was the first exercise in the country.

### Partnership with SLNA Manipur and SLNA Madhya Pradesh:

WASSAN Foundation and WASSAN conducted preparatory phase assessment of IWMP projects in these two states. SLNAsof these two states invited WASSAN for conducting assessment of preparatory phase of IWMP of selected districts. This gave an opportunity to understand how the IWMP projects are being implemented in different parts of the country. However, the partnership with SLNA Madhya Pradesh remained like "one-time" event and there was limited opportunity to contribute to the improvement of IWMP in this state. The association with SLNA Manipur extended to few more events – mainly capacity building/ training programs; workshops at the state level, etc. The district/ state level officers keep in touch with WASSAN team and seek information/ advice on IWMP related matters, from time to time. During 2015, series of meetings took place between senior officers of SLNA Manipur and WASSAN for providing training support to IWMP staff at Manipur. However, this idea did not travel much, as the concerned officers changed too quickly and too many times, during 2013-16.

### Partnership with SLNA Chhattisgarh:

This partnership with SLNA Chhattisgarh began in 2013. WASSAN, Center for People's Forestry and Access Livelihoods Ltd are formally members of this consortium. The main purpose of the consortium was to build capacities of functionaries working for watershed projects. SLNA, Chhattisgarh offered office space within SIRD for WASSAN. During the initial phase of this partnership, SLNA Chhattisgarh had the priority for completing the preparatory phase assessment of IWMP. During first year, WASSAN mainly concentrated on this agenda and completed the assessment of preparatory phase. During this period, there were limited number of training programs. During 2014-15, WASSAN developed several resource material/ modules and also training calendar, for the SLNA Chhattisgarh. Only part of these training programs were implemented and rest of the calendar could not be implemented, for variety of reasons. There was huge turn-over of the staff under IWMP at project (district/ sub district level) as they were not getting salaries; there were delays in fund releases from DoLR to SLNA to Projects; there were no review meetings at state/ district level by SLNA to sort out the issues and other administrative issues that could not be resolved for a long period. The CEOs of SLNA IWMP Chhattisgarh changed very frequently and they took little interest in sorting out these issues. Though this initiative began with good intensions, soon it became dysfunctional, as the leadership of SLNA Chhattisgarh paid little attention to IWMP related matters. WASSAN team made



several representatives with Principal Secretary of the department also on these matters. Though there was a positive response during the meetings, it did not materialize into concrete action. During the same time, SLNA IWMP Chhattisgarh requested WASSAN to support them in preparation of detailed project reports, to function as monitoring/ evaluation agency and other such responses. WASSAN also was willing to support SLNA Chhattisgarh on these issues, but could not get a formal partnership with SLNA on these issues. Meanwhile, there is practically no work for the secretariat established by WASSAN at Raipur for IWMP. After a careful thought and discussion with SLNA, Chhattisgarh WASSAN closed the Secretariat in Raipur in 2015. Even after making several attempts by WASSAN at senior officer's level at state/ New Delhi level, this partnership achieved very little. One of the main reasons behind this apathy at state level was also - the new policy related to centrally sponsored schemes. As there was huge confusion initially on the share of state governments; Government of Chhattisgarh was giving low priority to IWMP. This experience and partnership left a bitter taste for WASSAN, where huge opportunity to improve the program guality existed, but the potential could not be realized.

### Partnership with SLNA IWMP – Jammu Kashmir:

Watershed management projects were initiated much later in Jammu Kashmir state, in comparison to other states. They had to cover a huge backlog and move forward. They could establish State Level Nodal Agency and district/ project level staff were deployed by 2013. At this stage, SLNA IWMP, JK state requested WASSAN to support them in preparation of Detailed Project Report. WASSAN and WASSAN Foundation formally signed the MoU with SLNA IWMP JK State in 2013. As part of this partnership, WASSAN provided support services to SLNA IWMP JK state for preparation of detailed project repot for 42 projects. This included - conducting training programs; hand holding the teams in action planning process; demonstration of various planning methods/ tools; facilitating household/ plot level/ patch level surveys for planning for watershed projects; developing excel based planning tools; guiding the teams for developing technical choices, cost norms and documenting the detailed project reports. As the time available for this program was very short, patch planning method was promoted for the JK state. WASSAN also supported them in GIS applications for the action planning process. All Detailed Project Reports (DPRs) were completed, except two projects, where there is no team by mid-2014. After this process, WASSAN and WASSAN Foundation conducted the evaluation of preparatory phase of IWMP in JK state, on behalf of MANAGE, Hyderabad. This exercise was also completed by early 2015. After these exercises, there was a long gap between WASSAN and SLNA IWMP JK state. This is because of the uncertain policy on Centrally Sponsored Schemes, including IWMP. Another important reasons also change of senior officers at SLNA/ GoJK Level. During Jan



2016, WASSAN was selected as resource organization for JK state for concurrent monitoring of IWMP. The formalities of the partnership have to be completed. The partnerships with IWMP JK state was very satisfactory as the support provided to SLNA IWMP JK state helped the state to cross all hurdles, which are there (for a late beginner like JK state) during the initial stage and now it is among the toprunning states in the north India. However, in the light of 14th Finance Commission recommendations and other changes at DoLR, MoRD, Gol level, there are confusions and delays in even in JK state. The matters are more complicated now as the senior officers changed and there is also new government at state level, which is finding its own feet. Given this backdrop, the IWMP related agenda is taking back seat in JK state also.

### IWMP and Role of MELD Agency:

Department of Land Resources, MoRD, Gol ensured that all states have identified an external agency which provides "monitoring, evaluation, learning and documentation" (MELD) services to IWMP in respective states. The protocol of selecting these agencies was through "expression of interest", and tendering process. As per this protocol, bidder who quotes the lowest value is selected. Before this process of followed, SLNAs used to inquire about various resource organizations in the country and seek their services. As external evaluation of IWMP is an opportunity to reflect on the process and results achieved under IWMP, several states were keen on seeking services of repute organizations which have necessary competencies and proven expertise on watershed management. WASSAN was invited by several SLNAs in this manner. WASSAN was the first agency to conduct such evaluation studies in Tripura; Orissa, Chhattisgarh, Manipur, JK states. However, after introducing this new protocol of bidding, this system changed. WASSAN also applied to SLNAs formally for MELD positions, in last three years (2013-16). WASSAN's costs of conducting such evaluation was found to be generally higher than many other bidders. So SLNAs could not select WASSAN. It was found that many SLNAs in the country are facing several problems as they selected incompetent agencies as they guoted the lowest price. It is practically impossible to deliver the services at that cost, for any agency. SLNA teams in several states informally told WASSAN that this MELD arrangement is not serving any purpose and there are huge compromises that are happening in the name of MELD arrangement in case of IWMP. WASSAN brought this point (that the real input in terms of monitoring/ evaluation of IWMP is not taking place as the identified MELD agencies do not have necessary professional capabilities) to the notice of policy makers at national/ state levels. WASSAN hopes that this system would eventually change and competent agencies are invited to take up this responsibility of providing feedback to IWMP.



# Reflections on Rainfed Agriculture

### The Revitalising Rainfed Agriculture Network (RRAN) in WASSAN

After 10 years of WASSAN's work on watershed which was in rainfed areas, concept of a Network emerged in the context of several discussions across civil society, researchers and farmers led to identifying the need for evolving a relevant paradigm of development of production systems in rainfed areas. Feasibility and viability of such a relevant framework also need to be demonstrated in the field to build evidence based advocacy.

The Revitalizing Rainfed Agriculture Network has been seeded in such a discourse among a cross section of scientists, practitioners, civil society, bankers, government officials and others in 2007 in a joint workshop "New paradigm for rainfed farming - support systems and incentives" organized by WASSAN, CSA and Indian Council of Agriculture Research (ICAR)<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup>(http://www.rainfedfarming.org/documents/Rainfedworkshop\_Proceedings.pdf)



The network started forming its structure and various articulations from the experience of Wassan and other organizations worked in these areas and have formulated some evidences and proof of concepts.

Subsequent work with contributions from many organisations during the formulation of 12<sup>th</sup> Five Year Plan led to the following key propositions for a paradigmatic change in public policy related to production systems in rainfed areas (see Box).

In subsequent efforts, the RRA-Network evolved a program to build credible evidence on ground in the framework of RRA-Comprehensive Pilot program initiatives supported by advocacy, networking and research programs.

The network's strategy envisages an intense engagement with the mainstream programs and policy articulation, national and state research systems, media and civil society to bring focus on issues of rainfed agriculture. Engagement and establishing evidence within the mainstream is a strategic underpinning of the network.

Over 60 Organizations across the country, including ACWADAM, Aga Khan Rural Supporting Program

#### KEY WORKING PROPOSITIONS FOR REVITALISING RAINFED AGRICULTURE

- 1. Enhancing Soil Productivity : regular addition of organic matter in every ha of rainfed areas
- Expanding Protective Irrigation to secure rainfed crops (from ground and surface water sources : equity, productivity, efficiency and security aspects of water management) – protection of at least 2 acres of rainfed crops for every family
- 3. Seed systems : timely, quality, contingency, diversity → in the control of community organisations
- 4. Agronomic innovations : LEISA, SRI, NPM, SSNM and others and enhancing farmers' knowledge and management skills
- 5. Appropriate farm mechanization for enhancing labor productivity
- 6. Developing and strengthening **producers organisations** (resources management, credit access, securing inputs, value addition and market linkages, infrastructure)
- 7. Strengthening **Rainfed Livestock Support Systems** (health care, breeding, drinking water, fodder in commons, etc.)
- 8. Fisheries in numerous rainfed water bodies
- 9. Integrated value chain support systems to realise growth potential in pulses, millets, meat and fish production systems
- 10. **Risk minimization and resilience building** and enhancing private investments
- 11. Creating infrastructure and rural processing for agriculture products
- 12. Strengthening institutional capacities and decentralized planning.

Source:

http://planningcommission.nic.in/aboutus/committee/ wrkgrp11/wg11\_agnrm.pdf

(AKRSP), CHIRAG, Centre for Sustainable Agriculture (CSA), Chetna, Centre for Indian Knowledge Systems (CIKS), Central India Initiatives (CInI), Foundation for Ecological Security (FES), Pradan, Satvik, Sevamandir, Sahjeevan, Samaj Pragathi Sahayog (SPS) are part of this RRA Network. Research Institutions like Jawaharlal Nehru University (JNU), Central Research Institute for Dryland Areas (CRIDA), Indian Agricultural Research Institute (IARI), Directorate of Oil Research (DOR), etc are also involved. A research unit is established under the Indian School of Business, Hyderabad. The Centre for Budget Governance and Analysis (CBGA), New Delhi, is providing support for analysing the budget allocations and investments in rainfed areas.

In a phased manner, the network is focusing on working in following thematic areas related to broader canvas of rainfed agriculture issues. These include; macroeconomic analysis, soil health and conservation, land use and common lands, cropping patterns and food security issues, millets revival, seed and other inputs, water resources and irrigation, agricultural research and extension, croplivestock interactions, credit and financial services and markets etc.

At the ground level, the Network has made efforts to document lessons from field experiences related to soils, seeds, water, millets, fisheries, livestock and other themes. Write-shops for organized in this regard for experiences in Millets, Soil Fertility and Water related issues. Thematic analytical cases were developed based upon the proven field experiences. At the other end, large scale field experiences are being generated through fresh pilots. The up scaling and continuation of APDAI experiences belongs to such efforts. Comprehensive pilots are undertaken, in some selected locations across the country, with a focus to bring together the thematic areas embedded into the mainstream government programs. Such pilots are taken up in different locations, involving different functional nodes, established with RRA partners.

WASSAN played a center role in RRA Network since the idea level and later forming various strategies to make network a reality. From 2010 to 2013 WASSAN played the role of secretariat but after a review meeting it was decided to shift secretariat to Delhi and it was placed in Vrutti. After review WASSAN got a role of Coordination of network which included the role of policy advocacy initiatives and working with all CPs and Thematic Nodes on pilots and programs.

WASSAN anchors the Millets Node, Livestock Node and Policy Node of RRA Network and provides support to 8 locations across country to work on the various stages of millets revival. In past 5 years Network has emerged with various field level experiences on Millets production, processing, consumption and inclusion of millets in state nutrition programs etc.

### HISTORY OF EVENTS - REVITALIZING RAINFED AGRICULTURE NETWORK

Date	Name of events	Organized by	Venue / Place	Minutes / Proceedings / Published
7 <sup>th</sup> – 10 <sup>th</sup> May 2013	The RRA Review meeting	RRA network	Ford Foundation Office, New Delhi	Yes
14 <sup>th</sup> – 15 <sup>th</sup> May, 2013	National Workshop on "Rainfed Farming Systems Program under 12 <sup>th</sup> FYP: Evolving an Operational Framework"	CRIDA, Hyderabad	CRIDA Conference Hall, Hyderabad	Yes
25 <sup>th</sup> July 2013	First Governance Board Meeting of RRA network	RRA network	Planning Commission Office, New Delhi (2 pm to 5:00 pm)	Yes
12 <sup>th</sup> – 13 <sup>th</sup> August, 2013	Capacity Building Strategy Development Meeting	RRA network	MANAGE Executive Hall – I, Hyderabad	-
22 - 23 August, 2013	Science, Technology and Innovation Capacities: Sustainable: Sustainable Development in Tribal Rainfed Agro-ecosystems (presented to DST - SEED, New Delhi)	RRA network	DST - SEED, New Delhi	-
2 <sup>nd</sup> – 6 <sup>th</sup> September, 2013	National Workshop on Revitalizing Rainfed Agriculture – <b>First Program</b> for the South Zone (Tamilnadu, Andhra Pradesh and Karnataka)	MANAGE – RRA Network	MANAGE, Hyderabad	-
23 <sup>rd</sup> –27th September, 2013	National Workshop on Revitalizing Rainfed Agriculture – <b>Second Program</b> for the Eastern Zone (Odisha, Jharkhand and West Bengal)	MANAGE – RRA Network	MANAGE, Hyderabad	-
19 <sup>th</sup> – 20 <sup>th</sup> November, 2013	Workshop on "Understanding and Planning Inland Fishery Development in Rainfed Areas in India"	RRA Network	MANAGE, Hyderabad	Yes
17th – 19 <sup>th</sup> December, 2013	District level workshop on "Revitalizing Rainfed Agriculture in Arid Regions" organized by MANAGE and RRA network in partnership with their Kachchh partners.	MANAGE – RRA Network	Krantiveer Shyamji Krishna Varma University, Bhuj- Kutch	Yes
January 20- 23, 2014	Program Inception and Training Workshop	RRA – PACS Fisheries Programme	SAKHI Resource Centre, Madhubani, Bihar	Yes
May 12-15, 2014	Training Programme on "Revitalization of Rainfed Agriculture (RRA)"	RRA Network	MANAGE, Hyderabad	-
July 15-16, 2014	Orientation and Brainstorming Programme on Operationalizing Climate Change and Sustainable Agriculture Programmes under NMSA in Jharkhand	RRA Network, MANAGE, Jharkhand Govt.	Krishak Bhavan, Birsa Agricultural University, Ranchi	Yes



6th December, 2014	Second Governance Board Meeting of RRA network	RRA network	RRA Secretariat Office, New Delhi	Yes
December 26th-27th, 2014	Proceedings of the State Level Workshop on Operationalizing National Mission on Sustainable Agriculture (NMSA) Programs in Madhya Pradesh	RRA Network, MANAGE, M.P. Govt.	CIAE, Bhopal, Madhya Pradesh	Yes
4th February 2015	State Level Workshop on National Mission for Sustainable Agriculture (NMSA)	RRA Network, MANAGE, WB Govt.	SAMETI, R.K. Mission, Narendrapur, West Bengal	Yes
2nd - 4th April 2015	Planning Meeting for RRA CP	Parivartthan and RRA network	Parivartthan, Malkangiri	-
16th - 17th, April 2015	Training on Poultry Vaccination and Desi Breed Farm	RRA Malkangiri - RRA Network	Capacity Building Centre, Malkangiri, Odisha	Yes
2nd - 3rd July 2015	Training Programme Report on Desi Backyard Poultry Management	CAVS, WASSAN, RRA Network	Kotha Baleru Village, Srikakulam district, Andhra Pradesh	Yes
9th - 10th, July 2015	Training Programme Report on Millets based Consumption Benefits and Recipes	VSK - RRA network	Chhaterpur, Palamau district, Jharkhand	Yes
9th - 10th, July 2015	Proceedings of the training on Desi Bird Breed Farm Management and Preventive Vaccination	VSK - RRA network	Chhaterpur, Palamau district, Jharkhand	Yes
22nd - 24th July 2015	State Level Meetings for scaling up of RRA programme in Malkangiri district, Odisha with Departments of Agriculture, Horticulture and Livestock	State Government, Odisha	Bhubaneswar, Odisha	Yes
27th - 31st July 2015	Workshop on preparation of NMSA Cluster wise plans	RRA network	AKRSP-I	-
15th - 16th December 2015	Annual Planning Workshop of RRA network	RRA network	MANAGE, Hyderabad	Yes
27th January 2016	First Round Table Meeting on "Comprehensive Revival of Millets - Securing Nutrition and Surviving Droughts in southern India"	RRA network - ASHA Network	NKC Centre for Development Studies, Bhubaneswar, Odisha	Yes
8th February 2016	Launching of Comprehensive Revival of Millets Program (For Adivasi Mandals of Srikakulam, Vizianagaram, Visakhapatnam and East Godavari Districts)	RRA network	Vizianagaram Youth Hostel	Yes

29th March 2016	Second Round Table Meeting on "Discussion on Evolving Program Modalities for Revival of Millets Program of Government of Odisha"	RRA network - ASHA Network	Development Studies,	Yes
			Bhubaneswar, Odisha	

In last 6 years network and Wassan has achieved many milestones like some at this moment, several of the advocacy efforts have matured into substantive programs within the mainstream. The articulation, design, investment structure and institutional frame of these programs are developed by WASSAN while investments are made by Governments. WASSAN has also taken responsibility at a larger level in these programs while these opened up spaces for larger numbers of civil society organisations in implementation. These programs emerged through the proof of concepts established in field in last 7-8 years and now these programs are emerging as mainstream government schemes and programs for rainfed areas.

The RRA team within WASSAN implementing these programs are now at a stage where it has to deliver these larger mainstream programs which are getting into operational phase.

### The following are the programs:

- 1. Community Managed Seed Systems (in Anantapur) with an outreach to about 45 Mandals of 64 in Anantapur covering 50000 farmers.
- 2. RRA Program (Securing crops through groundwater collectivisation) with a Rs.16 cr support from Dept of Agriculture spanning 3 districts and 1000 ha area.
- 3. Navadhanya Crop systems: scaling up targeting about 50000 farmers
- 4. Comprehensive Revival of Millets program spanning 7 of the 13 districts in AP with about Rs.30 cr investment from the DoA.
- 5. Backyard Poultry program with an outlay of Rs.8 Cr. In Andhra Pradesh and 2 Cr in Odisha.
- 6. Comprehensive Revival of Millets program in Odisha 7 districts and 30 Blocks
- 7. Integrated farming systems program in Malkangiri district with about 30 cr budget.
- 8. A program on Comprehensively Addressing Farmers' Distress: a very large program about 1800 crores for 5 years.
- Fisheries work through RRA Fisheries Node in WASSAN: RRA fishery program anchored in WASSAN is facilitating to institutionalize fishery based initiative in rainfed area along with Comprehensive pilot (CP) locations in selected blocks of States majorly in West Bengal, Orissa, Jharkhand and Madhya Pradesh. When it comes to fisheries, the mainstream thought is that it can be done only in perennial water bodies and hence there has been no investment in rainfed waterbodies whereas farmers in these areas have

always been doing fisheries. In RRA program, we have attempted to come up with experiences on institutionalized efforts on small and rainfed water bodies.

The program has worked to institutionalize the fish-production and related value chain potential in the small water bodies and to access mainstream support from government department to realize such potential for livelihoods enhancement. By the end of year 2016, RRA network fisheries node aims to launch a massive Fishery in Rainfed area program" in collaboration with government and other scientific/government institutes like Central Institute of freshwater aquaculture (CIFA), Central institute of fishery technology (CIFT), National fishery development board (NFDB), and MoRD.

### Brief summary of work from 2013 to 2016 and outputs achieved can be summarized as:

- More than 150 farmer"s interest group (FIG) at Panchayat level in Jharkhand, Malkangiri and Bankura.
- Two fishery cooperatives and one FPO is registered in Jharkhand and 1 FPO in Malkangiri.
- Established two mini fiber hatchery system; one in Palamu, Jharkhand and other in Malkangiri, Orissa with technical and financial support of Central institute of freshwater aquaculture (CIFA, An ICAR institute). In this process, local community contributed in developing nursery unit, excavation of pond and brooder stock pond. Since last two years teams were trying to establish the portable hatchery but both the places were able to function it this year.
- Collaboration with CIFA on rainfed fisheries program for trainings, business development plans and other inputs.
- More than 1500 trained farmers at village level on best practices and pond management.
- Installation of android based MIS and pond specific advisory system for fish farmers in Jharkhand and Malkangiri. The app is also translated in Hindi and Odiya this year.
- Established a network of nearly 60 fish fingerling growing nursery in Jharkahnd and Malkangiri.
- Established linkages with government departments (In Jharkhand-Jharkhand fishery cooperative federation (Jhascofish), NABARD, NRLM ; In Orissa- District Fishery department in Malkangiri, ITDA, OTELP; In west Bengal- District fishery dept, In Madhya Pradesh with KVK)
- In Odisha a proposal for 4 districts is submitted to Fisheries department and there is opening with department to have a scale up program of Malkangiri experience in 4 other districts of Odisha.

- A report on tenural Rights issue of fisherperson in Jharkhand
- A film on fisheries experience of Jharkhand

In 2014 program design emerged through pilots in Jharkhand and Malkangiri but during review some realigning was proposed on the design. In the year, 2015 effort was majority on to scale up program and to strengthen block level farmers institution. In continuation of ongoing effort, thematic node will attempt to achieve following set of interventions.

The work done in fisheries has came out with few models which can work in rainfed context. These models produced enough fish in seasonal ponds to bring attention towards the investment on fisheries in rainfed areas. In Jharkhand, Odisha and West Bengal there is enough experience to take initiative to state level mainstream program. Efforts are made to come out with a eastern India program on inland waterbodies in collaboration with NFDB.

• Efforts and initiative of RRA Coordination team of WASSAN- The Program and Policy Nodal team of WASSAN draws heavily from the networks, experience, expertise, past and present initiatives and human resources of WASSAN. The agenda of RRA and RRA-N is inseparably integrated into the institutional mandate of WASSAN. This node was started in Wassan in 2014 and plays the central role in managing programs and policy related initiatives of Network.

The Coordination & Advocacy Node of WASSAN focuses on several program areas. At present this node supports RRA-CPs in 6 locations in 5 states.

The Key Result Areas for this program support are:

- 1. Coordination Function: Support to RRA-Comprehensive Pilots and Thematic Nodes
- 2. Capacity building and leadership development in the Network
- 3. Advocacy:
  - i) State level advocacy
  - ii) Policy Articulation and Advocacy
  - iii) National level advocacy
- 4. Supplementary initiatives on thematic areas
- 5. Networking
- 6. Communication and Resource Material development
- 1. Coordination Function: The coordination team helps TNs and CPs in designing programs, provides support and handhold advocacy related initiatives. The Node has taken responsibility of working with the Thematic



Nodes in developing the thematic policy articulation, developing the conceptual framework for field initiatives and RRA program, liaison with the CPs in the regular support functions of the thematic nodes. The Node also backstops the CPs on aspects for which there is no dedicated thematic nodal anchor. The main function of the Node has been to facilitate annual planning and review meetings. These meetings sets the ground for interaction among the Thematic Nodes, Comprehensive Pilot partners, ResRA and the Secretariat. Through these meetings a joint work plan emerges which works as guide book for the year. The Node also provides support to CPs and Thematic Nodes in terms of developing/ refining their strategies and concepts during the regular course of implementation and ensuring the focus on RRA agenda.

In 2015, three meetings with Partners for planning and sharing has been organised by the Node team. Two meetings happened at regional level, one in Betla (Jharkhand) where Palamau, Dewas, Burhranpur and Bankura CPs participated with all TNs, ResRA and Secretariat. Second meeting was organised in Malkangiri for Mahaboobnagar and Malkangiri CP in month of March 2015. In these two meetings one year action plan of Network emerged for the period of April 2015 to December 2015. These meetings are planned to come out with annual action of Network and take a stock of previous year's achievements and gaps. In the some of the states like Odisha, AP and Telangana progress is very good whereas states like MP, Jharkhand and Gujarat could not move very far because of several reasons like no active participation of partners in advocacy related initiatives, frequent transfers of District collectors and other officers at district and state level.

- 2. Support to Comprehensive Pilot Programs& Thematic Nodes: The team supported many intitatives at field level to come out with new proof of concepts of the proposition network believed in and worked to articulate for new policy paradigm in context of rainfed agriculture. Following are some of such initiatives:
  - Critical Irrigation Pilots: The team supported all CPs in initiating 'Critical Irrigation' pilot programs within the limited geographical area (~100 ha). The purpose of this pilot is to demonstrate layered interventions with demonstrable impacts without much dependency on convergence of government investments. This is also expected to provide some lead in engaging with PMKSY. In all the CPs planning is done and implementation is in progress. We can see results in coming Kharif on protective irrigation. Till now 2 pilots in Malkangiri, 2 in Palmau, 1 in Dewas, 2 in Bankura, 1 in Nagpur are in progress. An opportunity to

include critical irrigation pilot in Pradhan Mantri Krishi Sinchai Yojna is available in Malkangiri.

- Andhra Pradesh: WASSAN continues supporting APPS a new CP in Network (added in 2014) in formulating programs at district level, Anantpur, A.P. APPS is anchoring a district level network implementing a large district level pilot program supported by Dept of Agriculture (the program is called RRA Program – with budget about Rs. 10 Cr.). Because of experiences of ananthpur program a larger program on revival of millets in AP for 7 districts in 47 mandals have come. Also CMSS program has expanded along with a big program on ground water collectivization.
- RRA-CFT Integrated plans at CPs in Palamau (Jharkhand) and Bankura (W.Bengal) Convergence Proposals of clusters of CFT program were submitted to district collector in both districts, Palamau and Bankura in 2014. CFT is a program of MoRD which is initiated to streamline MGNRES in backward districts of country. RRA initiated a convergence between CFT and RRA approach in Jharkhand with the support of Joint Secretary, DoRD and State Government. Along with plan preparation, four district level workshops with all line departments under chairpersonship of collector was organised in Palamau on convergence proposal and a lot of work has also started. To include the proposal in state plan, District collector had written a letter and also submitted it to Principal Secretary, Agriculture in month of June. The team has been meeting Director Agriculture as well regarding the proposal and there are many chances that proposal will be accepted by the department for agriculture related components.
- NMSA Since 2014 RRA team have been working on NMSA in all the 6 states where network is working. In Jharkhand, West Bengal and MP workshops on NMSA happened. After workshop, NMSA- CP plans (for CCSAMMN component) were prepared and still being negotiated at district and state level in Bankura, Palamau and Mahabubnagar (Telangana). In Palamau proposal has been officially submitted to Principal Secretary, Agriculture by district collector and follow up meeting also took place. The proposal has chances to get approval soon. In other districts it is still in process to go to state from district.
- NMSA plans in MP After state level workshop in December 2014, a program for 10 clusters in 5 districts (Dewas, Burhanpur, Panna, Chindwara, Anuppur) was initiated. The official letter was issued in June to RRA consortium after which a planning workshop for all partners was

conducted in Khandwa in July 2015. Planning process is completed in 4 clusters of 2 districts (of 2000 ha each) – at SPS (Dewas) and PSI (Panna). A district and state level meeting is pending with partners and government to discuss the proposal.

• **Malkangiri:** In 2015 few meetings at state level meetings with Principal Secretary and directors of all departments took place and District level scaling up proposal was initiated with District collector, PD DRDA, ITDA, Agrl and heads of AH, Horticulture, Fisheries departments; a proposal worth 40 crore is submitted for a state level discussion which is being approved by state as special proposal for Malkangiri. This proposal is being sanctioned in RKVY and State plan is announced in budget session by finance minister.

WASSAN has been supporting Malkangiri program of RRA since 2012. Many experiences emerged in the watershed programs of Malkangiri in which WASSAN is playing role of resource support organization.

- Engaging with Department of Science and Technology: This was an initiative of Dr.Rajeshwari Raina, a core group member of the ResRA which started in 2013. Proposal along with CRIDA was submitted for 8 locations. After the workshop and presentation made in month of July, 2014 and follow ups another meeting happened in month of October with DST again on the proposal. The committee was very supportive of proposal have asked consortium to revise the proposal and submit it again for consideration. The team is going to rewrite the proposal and have another round of presentation in 2016.
- State level engagements: In last two-three years' work, two specific strategies were evolved to link the RRA- CPs to district and state level Departments. In partnership with MANAGE (National Agriculture Extension Institution) central RRA-training programs are continuously organised for the district and state level officials on RRA approach along with the CP partners. This provided a ground for discussion and collaboration between team and officials. Along with central training programs few state level workshops were organised on various themes. This helped in opening many initiatives at state level and also helped in recognising RRA Network and its initiatives at various levels. This also established credibility of Network amongst various department and institutions.

District level workshops were initiated in the above process on RRA agenda, process and CP work. Senior officials from the Department were involved in such meetings. The Node provides support to CPs in framing



their program for presentations, submission of proposals to the district administration etc.

In addition to taking up district level initiatives in the existing locations of RRA-CPs, significant work has happened in Anantpur district of AP, which is a new CP now. Efforts are on the way to open up convergence programs in the tribal areas of Srikakulam district where the earlier program on inclusion of millets into ICDS was implemented and now BYP thematic pilot is successfully running. A CP level initiative is in process which will be majorly implemented with district administration through convergence.

**West Bengal**: Apart from the convergence proposal one state level workshop with Dept of Agriculture; in principle acceptance of critical irrigation pilots in a world bank program negotiated by PRADAN happened; we are awaiting district level workshop in Bankura proposed in collaboration with MANAGE as District Collector was transferred twice during this period.

Jharkhand: One state level workshop on NMSA happened; after that submission of NMSA plan through District Collector along with integration of RRA approach in CFT program were the main highlights of last year's work in Jharkhand. On the same proposal again team in initiating discussion with the new Director, Agrl. Fisheries program is now being scaled in Latehar district as well.

**Odisha**: District level scaling up proposal for Malkangiri – proposal at final stage of sanction.

**Telangana**: A state level round table agreed by Secretary, Agriculture on NMSA. There is in principle agreement on M'nagar CP to be proposed for NMSA (CCSAMMN). A larger program with Rural Development at conceptual stage (after 2 workshops and proposal) is in loop. Also, there is plan to have a collaborative program with MANAGE – Extended CP with 3 Blocks will open up before December. But things are moving slow in Telangana after the bifurcation of state.

Andhra Pradesh: Comprehensive Revival of Millets: the program guidelines have been issued for 7dist, 47 mandals and 1 lakh acres): this program is called a 'farm to plate' program which focuses on production and consumption both. This will be major scale up program in AP. The inauguration of program has happened in beginning on Feb and its rolled on in all the districts.

- Community Managed Seed System: Now mainstream in Anantapur with a target of 3.5 lakh quintal of certified seed production.
- RRA program (securing rainfed crops through collectivising groundwater): 2nd phase started with an expansion to 1000 ha in entire state. This program is also in implementation phase.
- RRA program Government Initiative to include it in all IWMP watersheds. Guidelines issued recently.
- CFT-RRA Initiative to include RRA propositions in MGNREGS: a proposal to MoRD

Efforts were made since some time to take up collaborative initiatives with the MGNREGS national consortium. The Node has facilitated convergence meeting with the consortium and RRA-N. After the effort of integrating the CFT-program of Ministry of Rural Development with RRA agenda had taken off in Jharkhand which took almost an year to get hold on ground. The first mandate was given by the Ministry of Rural Development, Govt of India to initiate this process in 2015. Integrated plans (CFT-RRA) are developed in Jharkhand and W Bengal. After one round of experience the team approached JS DoRD again to update on the progress and discuss the further discourses on the initiative. The DoRD appreciated the concept and asked for the proposal of expansion in 10 blocks of 5 states as second phase of pilot before it can upscaled in all CFT blocks. The proposal has been accepted in principal and will be approved for the coming financial year.

 Reflections on the Livestock related initiatives in RRA program of WASSAN by livestock Node- The node was initiated in 2013 under Revitalizing Rainfed Agriculture Network to provide thematic support to Comprehensive Pilots (CPs) to generate evidences in extensive livestock production system which does not get attention from the policy makers. This programme also aims to advocate greater need of strengthening this kind of production system prevalent in throughout rainfed areas in the country by engaging dialogues with district and state department for reorientation of policies and programmes on extensive livestock system.

Livestock Node of RRA Network has designed following programmes at CP locations for generative evidences from the ground.

 Revival of Extensive Back Yard Poultry production through establishing support services in enterprise mode- that includes ensuring regular supply of chicks, vaccination services and promoting improved management practices at household level.

- Multi-dimensional Goat Cluster Programme envisages improving productivity within a given 'area' (area- productivity) or a cluster of villages by integrating regular paid vaccination services, ensuing fodder security and supplementary feeding, proper night shelters and collective marketing.
- Decentralized Community Managed Preventive Animal Healthcare programme is designed to mainstream vaccination services through community institutions (PRI/SHG federation/ village institutions) in collaboration with Department of Animal Husbandry.
- Realizing potential of Goat and Backyard Poultry programme, Livestock Node,opened up scale up programme on Goat and Backyard Poultry in Vidarbha, Maharashtra and Srikakulam district of Andhra Pradesh. There are thematic pilots Livestock Node – WASSAN – RRA Network (January – December 2015) 2(TPs) where aim is to expand the programme quickly through convergence with Government Programme. New partnership has developed with Chinnaiya Adivasi Vikash Samiti (CAVS) in Srikakulam and with YUVA Rural Association (YRA) in Vidarbha region of Maharashtra.
- Besides, above three specific programmes in CP locations, Livestock 0 Node has started exploring strategies of improvement and conservation of indigenous livestock breeds. Two states, namely, Telangana and Odisha were selected for documenting and registering local livestock breeds to bring Government's focus on indigenous breeds which are more resilience in climate variability and adapted to local resource base. Under this initiative, collaboration with Department of Animal Husbandry and Telangana Biodiversity Board whereas, Sahjeevan, NGO based in Kachchh district of Gujarat, having experiences in registration of indigenous breeds in Gujarat, is associated as resource organization. Livestock Node works closely with CP partners in formulating location specific programme design, framework of implementation, define outputs and milestones, and develop strategies for advocacy at district and state level. Node also works towards building capacities of CP staffs who are engaged in implementation of livestock programme. Node encourages cross learning among CP and thematic locations in order to promote exchange among partners. Livestock Node also took responsibilities in Developing district and state level programme on extensive livestock system to mainstream with Government Departments. WASSAN engaged and provided inputs in formulating enabling policies for Small Ruminant Development in Andhra Pradesh.

### • Various initiatives of Livestock team in 7 states in through RRA network-

- One the basis of success in RRA sites on Backyard poultry, AP, Telengana and
- Odisha government are now ready to invest on indigenous birds as per project
- o designed under RRA Network.
- Government of Andhra Pradesh committed financial allocation of Rs 8 crores to revive backyard poultry with indigenous birds for 4 districts. Whereas Odisha and Telengana State is also expected to sanction mainstream programme on Backyard poultry.
- NGOs like Seva Mandir, has sought collaboration from RRA Network to promote backyard poultry in Udaipur district of Rajasthan and ready to alter their ongoing programme on improved birds.
- Small Ruminants, both Sheep and Goats are now getting attention by policy makers.
- o States like Andhra Pradesh started preparing State Small Ruminant Policy.
- Mainstream programme on Small Ruminant submitted to AP and Odisha Government
- and those programmes will receive financial allocation from State's budget in 2016-17 financial year. Around 6-7 crores public investment is expected in coming financial year.
- Access to Government Vaccine supply has increased in CP locations, due to continuous engagement with Department of Animal Husbandry. Process of submission of vaccine indent also helped in increase availability of vaccines in CP locations.
- Agenda on indigenous livestock breeds, which are well adapted to local ecosystems, has got space in livestock programme of RRA Network. Processes of registration of local breeds have been initiated in Telangana and Odisha. State agencies have also been involved in this initiate.

We have this year envisaged implementing programmes at CPs and TPs locations as a strategy to create evidences on RRA approach for strengthening extensive livestock production system. Such strategies have helped to do advocacy with districts and states to converge government programmes at the first stage and develop mainstream programme onRRA framework. This strategy worked out well, particularly on availability of vaccines, establishing fee based vaccination services, and opening up mainstream programme with Government. There are very encouraging developments with AP, Telangana, Odisha Government, however, we could not create much space in Madhya Pradesh and Jharkhand. We were supposed to organize national level



conference, but unable to do so, as result from field have not in our hand. Livestock Node is planning to organize those conferences in 2016.

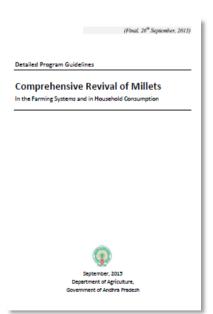
• Experiences on Millets in RRA program- WASSAN has been heading the millets program of RRA Network since beginning. Node evolved many field level initiatives to bring back millets in farms. There are many reasons for millets to vanish from rainfed areas like productivity, processing issues, non availability of seeds, no focus of government and extension institutions on millets, markets etc. The node worked to come out with solutions and programs on millets production, processing, consumption and markets. Small pilots in Malkangiri, Mahaboobnagar, Ananthpur, Jharkhand, Srikakulam, Dewas on various aspects of millets along with other organisations. The programs like Grain based landscape supported by Hivos and RESMISA an action research pilots supported jointly by IDRC and CIDA were amongst major programs in bringing experiences on platform. These experienceslead to two big mainstream Government programs in Odisha and AP on comprehensive revival of millets. Details of these programs are described in detail:

### 1) Comprehensive Revival of Millets: And End-to-End Initiative on Millets Revival in Andhra Pradesh, India

WASSAN initiated the discussion on revival of millets with Government of Andhra Pradesh based on experiences of APDAI, GBL and RESMISA projects.

The initiative was followed by series of consultations and finally leading to Andhra Pradesh and Odisha Government announcing a comprehensive revival of millets programme. WASSAN is lead technical agency for the program.

WASSAN is responsible for program design, developing M& E process, technical support and documentation. The program in AP is now taken up in 7 out of the 13 districts of the state in two agroecologies vis., the higher elevation tribal areas and the arid, semi-arid rainfed areas. With an envisaged coverage of additional 100,000 acres (40,000 ha), the program touches lives of over 75,000 households. Apart from the program investments, it



provides facilitation costs for over 45 NGOs who supports farmers' organisations in the field in achieving project objectives.

In Odisha it is in 7 districts and 30 blocks of southern Odisha, for 100000 acres. The design of the program is as following:

The program design has the following broad elements:

- **Consumption campaign:** (households, local food enterprises) engaging women in a large way, establishing platform events to revive old recipes and evolve/ spread new ones through recipe competitions, promoting local millet bakery products, ready to eat food items etc. Along with these campaigns, local enterprises will also be promoted. The program also supports a campaign in the urban areas and promotion of urban outlets. Inclusion of millets into state-food-programs is also envisaged.
- **Productivity improvement and diversified crop systems:** to set up appropriate seed systems, identify and promote locally appropriate crop systems, agronomic practices such as System of Crop Intensification and such other measures with non-chemical inputs.
- **Processing Enterprises:** to promote the two types of processing enterprises viz., for local consumption and for quality value added products. The program invests on promotion of at least one processing enterprise for local consumption in a cluster of villages.
- **Producers Organisations and Market Integration:** facilitation costs for organising farmers to set up required support systems like seeds, harvesting and post-harvest machinery, access credit, promote aggregation, setting up storage facilities etc.
- MANAGE, MoA and CRIDA are knowledge partners in the program.

### 2) Grain Based Landscapes (GBL)

WASSAN was funded by HIVOS for research and policy initiatives on Millets.Efforts are made to develop the backup systems to promote and nurture such 'Ecosystem of Enterprises' drawing upon expertise from the informal multi-stakeholder platform. Following were major learning's / achievements of the GBL initiative. This program gave us a break through to learn and showcase examples on field. This resulted in mainstream program in AP and Odisha.

a. **NAVADHANYA-** A Traditional Poly-crop Model for Diversified Crop Systems:One of the partner organisation in Anantapur district 'HANDS', initiated the dialogue on Navadhanya system of cropping traditional to that area. This discussion has come up earlier in the platform meeting. With the GBL initiative, this system was tried in 10 locations in Anantapur district in different agro-ecological regions. The traditional poly-crop model has millets, pulses, oil seeds in proper combination and provides regular harvests till late winter; it's a one-time sowing and multiple harvest models.

Department of Agriculture has agreed to invest on farmer based extension of this traditional system in Anantapur during the monsoon season of 2016-17. The program evolved for this purpose targets spreading the system to 50,000 farmers in the district with an investment of about Rs.200 millions. This is at final stages of sanction.

- b. Inclusion of Millets in State Nutrition Programme: WASSAN-CAVS initiated a dialogue among the Women and Child Welfare Department, ITDA and district administration of Srikakulam on introduction of millets in state nutrition programs, ICDS in particular succeeded. Department requested supply of millets to the welfare hostels on a regular basis. WASSAN- CAVS identified an entrepreneur for processing. ITDA has provided a loan of Rs.2.00 lakhs (with part grant) to establish the processing facility. An processing mill was established in Seethampeta Mandal run by the entrepreneur to supply to the hostels. Victor Machines, one of the fabricators who participated in the multi-actor platform meeting in Anantapur, is providing an upgraded machine for millet processing. A similar order from the Women and Child Welfare Department to supply millet biscuits resulted in one of the SHGs establishing a small unit after getting training. They are making biscuits on a regular basis and supplying to ICDS and also selling locally.
- c. **Productivity Enhancement:** Loss of niches for millets production with spread of mono-cropping is a major problem in the promotion of millets. Millet based crop systems are to be revived duly addressing the issues of labor and profitability. In Srikakulam WASSAN CAVS has succeeded in its advocacy with The Integrated Tribal Development Agency (ITDA) to spread millets in 3000 acres in 3 Mandals in Srikakulam district. This simple initiative is to provide millet seeds across these Mandals and recover the seed post-harvest for further distribution. The outreach has expanded to more than 1000 farmers. The local youth being nurtured in trading millets were given this assignment and are also attempting to procure the produce from them.
- d. Incubation of women Snack Food Entrepreneurs: Training modules are developed with organisations having experience in snack-food preparations to train and support at least 10 women entrepreneurs from Mandals in Anantpur and Srikakulam. These training programs are

designed as experiential learning and train identified women in the business in at least 50 items and helps them to choose / configure their business niches based on local markets. KVK, Kadapa district (ANGR Agriculture University) partnered with the project in setting up a training and enterprise incubation facility for preparation of various bakery items – biscuits, cakes etc. While Earth 360 (http://www.earth360.in/earth360.html) is developing an entire incubation facility in Kadiri, Anantapur district.

- e. Incubation of processing micro enterprises: Earth 360, a partner social
  - enterprise specialising in millets of is developing the program modules and required facilities to experiential provide learning (program) for prospective millet processing entrepreneurs. A small team people of having experience visited all known millet processing units in the state to assess the machinery and issues



related to processing. This group will evolve into a peer-support group for entrepreneurs for providing experiential learning, advising in selection of machinery, negotiation with the vendors, planning the business and problem solving. It is envisaged that about 150 such enterprises will be established during the project period. Efforts will also be made to establish credit lines for these enterprises.

f. Incubation of local traders: Incubation of Local traders is another area which is piloted in Srikakulam by WASSAN- CAVS. Local tribal youth are identified and are trained in millet procurement. This is at an initial stage. These youth are linked to the traders elsewhere and are encouraged to move into aggregation and trading of millets.

### g. Markets and Marketing Support:

✓ Storage and Credit: A policy discussion at a higher level initiated by WASSN - Earth 360 resulted in the state marketing department agreeing for allocation of one store-house at the Kadiri market yard for storing millets. Farmers who use this facility will get 70% of the value of their produce stored as loan. This will ease several problems for the processors as farmers can hold on to their stock against an agreement with the processors on price spread out over the year. Additionally, some grading and cleaning facilities will also be established. ✓ Farmers' Bazaars: Called 'Rythu Bazaars', these farmers markets are established by the state government in AP in all the district head quarters. A special stall dedicated to millets was successfully advocated by an organisation in Visakhapatnam district; WASSAN -CAVS has succeeded in setting up a market outlet in Srikakulam district while Tirumala Organics established it in Anantapur Rythu Bazaar. These became effective consumer interfaces in the districts where farmers' groups can brand and sell their produce.

# 3) RESMISA (Revalorizing minor millets: Enhancing the food and nutritional security of women and children in rainfed regions of South Asia using underutilized species)

WASSAN was one of the partners in the south Asia project on Millets called RESMISA project following were some of the outcomes of the project

- Inclusion of Millet Porridge in the ITDA hostels of Malkangiri, Odisha on a pilot basis.
- Setting up community seed systems with quality seeds of fourteen varieties of seeds.
- Worked with over 2500 farmers on millet production through location specific natural resource management practices

In RRA program, WASSAN as an organization moved much beyond from the experiences of watershed to production systems approaches of rainfed agriculture. Various pilots on 10 thematic Nodes in different agro ecologies lead to decentralized block level planning and implementation model. WASSAN strongly advocates block level policies of rainfed agriculture. It is observed that block level planning can be easily accessed by most of the farmers and it works well for the diversity of the region and livelihood related to diversity. The systems can be evolved around various production systems to provide support at block level and it can be extended to panchayats and villages through extension. Block is a manageable unit. In the approach of RRA it is envisaged to shift from input and subsidy based approach to systems based approach.



# Reflections on Participatory Groundwater Management

### Integrating Participatory Groundwater Management in IWMP and Pilots in NABARD Funded Watersheds:

WASSAN always believed that water "conservation alone" does not work. Water management/ governance that focuses on demand management which includes regulated use of groundwater; improving access to water; crop pattern changes; soil fertility improvement; improving efficiency and knowledge about groundwater issues at local level. Under IWMP and NABARD funded watershed projects, several efforts are being made to ensure these elements are introduced in the projects at field level. These experiences and related reflections are already mentioned in earlier sections on reflections on practice.

### **Pilots under RKVY**:

Under Revitalization of Rain-fed Agriculture initiative, WASSAN is promoting initiatives related to collectivization of groundwater in Anantapur district. As part of this initiative, REDS, RIDS, Accion Freterna, HANDS and WASSAN are able to



motivate borewell owners to share water with farmers who do not have borewells. Existing private bore wells are networked within pipeline grids and various outlets are established on this grid, so that farmers could have access to irrigate their lands, irrespective of borewell ownership. This pilot is sponsored by Department of Agriculture, GoAP under Rashtirya Krishi Vikas Yojana. Based on the successful experiences of experience, Government of Andhra Pradesh (Department of Agriculture and Department of Rural Development) agreed to up-scale this to other projects/ districts. As part of this, Department of Agriculture, GoAP extended this program to Kurnool and Chittoor districts, under RKVY stream. This pilot is being anchored by WASSAN, as a lead technical expert.

The main achievements of these pilots are the following:

- Because of the critical irrigation to the crops (even on wetting) farmers are getting 2-4 bags additional yield from one acre of land.
- On an average, each farmer is able to additional income of 5000 Rs/acre.
- Area under irrigated dry crops increased by 10% in the project area.
- Provided security to the bore well owning farmers as they could strictly ban the digging of new bore wells by neighboring farmers in the selected plots.
- Because of the awareness, farmers realized that they do not have to dig new bore wells, for accessing water.
- This program could influence the IWMP/ Department of Rural Development and in future it is likely that this department will take up this initiative under IWMP.
- Due to the positive impact of this pilot, Government of Andhra Pradesh extended this initiative to 30 Mandals in the Rayalaseema districts.

### Some of the challenges that continue to plague the initiative are the following:

- Timely releases of the budget from department.
- Conflicts and problems within the farmers. Social norms are yet to be evolved within the farmers as well as in the villages.
- There is limited budget allocation for awareness to the community; for evolving social regulations among the communities.

### PGWM in Mainstream Watershed Projects at a scale:

Though Department of Rural Development, GoAP worked extensively on this model and agreed to take up this initiative in 200 blocks under IWMP, this did not move forward. During Annual Network Meeting 2015, Principal Secretary (Planning and RD, GoAP) announced the launching of this initiative under leadership of Department of Rural Development. WASSAN developed guidelines for this initiative "Maa Neeru Maa Sedhyam" under IWMP during Apr to July 2015.

WASSAN hosted several workshops/ exposure visits as part of promoting the groundwater collectivization under IWMP. While most of the protocols made significant progress, the changes in senior officers within the department in Dec 2015 have negatively influenced the formal approval of this initiative. WASSAN is still maintaining its optimism and making serious efforts to influence the IWMP on this agenda. Neeranchal Project is an opportunity in this context for WASSAN.

### **PGWM in IWMP in Neeranchal**:

Neeranchal is an initiative that aims strengthening Integrated Watershed Management Project by integrating aroundwater management concerns within IWMP. This is a World Bank funded project. After several hurdles, this project was formally approved by Cabinet of Ministers, Gol in Feb 2016. Before this formal approval, WASSAN and UNDP have a formal agreement to "pilot" the integration of Participatory Groundwater Management principles and practices into IWMP. As WASSAN is working on these issues for a long period (In Pariai/ other NABARD funded watersheds), this partnership with UNDP was a welcome agenda for WASSAN. This formal partnership was initiated in Nov 2014. As there were several changes in the policy framework of IWMP in the country since 2014, this action on this agenda was postponed by Central/ state government for a long period. After the formal approval of Neeranchal by Gol, the DoLR started moving the next steps on this program. Meanwhile, WASSAN collaborated with SLNA Orissa, Andhra Pradesh and Telangana for providing necessary support services on taking this agenda forward at the district/ project level. The field work in Orissa (Kandamal district) in completed before Mar 2016, while the field work in Andhra Pradesh (Anantapur) is and Telangana (Mehbubnagar and Nalgonda districts) is likely be completed before June 2016.

### Partnerships with Bharat Rural Livelihoods Foundation:

Bharat Rural Livelihoods Foundation is a grant making organization that is focusing on central tribal pockets of India. As part of this agenda, several NGOs in Jharkhand, Orissa, Chhattisgarh, Madhya Pradesh and other central states of India are receiving grants from BRLF. WASSAN and other members of Participatory Groundwater Management network (ACWADAM; ACT; PSI) are providing necessary technical/ knowledge inputs to these partners on promoting principles and practices of Participatory Groundwater Management in these villages. This initiative began in 2015 and WASSAN team already visited partner of BRLF and provided necessary support services on this agenda. This partnership is for four years.

### **Partnership with INREM**:

Nalgonda district in Telangana is notorious for the contaminated water with fluoride. As a result, people of this district have been suffering from dental and skeletal fluorosis for generations. As the borewells have increased with time for last 40 years, the groundwater quality deteriorated and the incidence of fluorosis started increasing in all mandals of the district. Considering this, government have established multi village schemes for the district and started supplying safe drinking water from Nagarujuna sagar dam. While this system is expected solve the problem to a large extent, the reality is different. As this system does not work efficiently, the safe water from Nagarjunasagar does not reach the villages each day and there are several uncertainties associated with this water supply. WASSAN intends to improve the functionality and efficacy of this public system by developing a community based monitoring system of this drinking water supply arrangements. INREM, a development agency working on fluorosis issues in different parts of India, is supporting this initiative. As part of this, WASSAN is piloting a monitoring system (using Kobo Collect Tool) that could track the functioning of this multi village scheme in the district and provide feedback to the decision makers/ department and others, on regular basis.



## New Initiatives

While there are several new projects and tasks that crop up each day in WASSAN, some of these new initiatives are worth mentioning. Since 2013, WASSAN is able to engage with these new ideas and there is an excitement around these themes and initiatives.

### **Crystal Drops**:

This is a project that aims at creating WASH facilities (safe drinking water; Sanitation) in selected villages of RR District, where WASSAN is implementing IWMP and other programs. This project was initiated in Oct 2013. This project was supported by HSBC Electronic Data Processing India Pvt. Ltd. The total time period of the project is three years with a budget of Rs 2.23 Crores. By Mar 2016, the project completed first phase and almost 90% of the second phase. The project activities of 3rd Phase are also initiated. As part of this project, WASSAN team developed WASH Visions (action plans) for each village. These plans systematically analyze the existing WASH facilities and provide options for improving these facilities and services. Based on priorities of the local communities, these WASH Visions are finalized. Village level committees are established to facilitate improved WASH services.

Since 2013, WASSAN was able to provide

- ✓ 230 Families have toilets at home in 10 villages
- ✓ 765 Families have access to drinking water in 7 villages
- ✓ 508 Families have access to better drainage facilities in 6 villages



- ✓ Girls 497, Boys 376 Students in 9 schools have access to toilets at school in 8 villages
- ✓ 55 No of WASH Campaigns are conducted
- ✓ 38 trips by WASH Volunteer by HSBC Teams in 38 field days
- ✓ Expenditure under Crystal Drops so far: Rs 6373130
- ✓ Contribution from People: Rs 1925792
- ✓ Total Expenditure: Rs 8298923
- ✓ Funds Mobilized from Government: Rs 3585900

This project offered an interesting experience to WASSAN and also challenge. When small hamlets like Chenchu Colony with 28 families attained "open defecation free" status, it was an occasion for celebration. When Grama Panchayat of Sivareddy pally replaced the dysfunctional borewell and repaired it with their own money (to ensure regular supply of water), it was another occasion to celebrate. However, the challenge is to find out how the costs involved in operation and maintenance could be mobilized from local groups/ committee/ Grama Panchayats. The quantum of finances required for this purpose are too high to be mobilized from monthly taxes/ bills. So the infrastructure on WASH facilities has to be backed up with a strong finance model, so that these facilities survive and deliver the promise. WASSAN and HSBC teams are engaged with this issue of sustainable services for some time now.

### Enhancing Natural Resources Based Livelihoods In Rainfed Areas – Partnership with Azim Premji Philanthropic Initiatives:

This program was initiated in Dec 2014, with the support of Azim Premji Philanthropic Initiatives. The project aims at strengthening natural resources in selected villages and facilitate a process of 'spreading out' to surrounding villages through a variety of strategies. The project period is three years with an outlay of Rs 1.8 crores. This project is being implemented in Doulatabad, Kosgi and Bomraspet Mandals in Mehbubngar and Anantapur district.

As part of this project, WASSAN team is strengthening irrigation facilities for rainfed farmers; livestock production systems; seed supply arrangements; processing and marketing of pulses (cultivated without pesticides); diversity in agriculture (millets; pulses; vegetables); improving soil fertility and so on. Efforts are also made to access funds from government schemes such as MGNREGS, etc. With the support/ convergence with Department of Animal Husbandry, vaccination camps are being organized to reduce the mortality rate of livestock in these villages. Farmer's cooperatives are being strengthened in these mandals with specific business plan and credit line. Business Services and Information Center (BSI Centers) are being established at Cooperative level to provide institutional support to a variety of services. While some of the components move forward, other tend to take more time than anticipated. Particularly, components that have strong dependence on government funds are getting delayed. Marketing related initiatives also take considerable time and efforts. Networking with large numbers of consumers/ markets demands a different set of skills. All the efforts would go waste, when there is no rain. The dependency on rainfall is absolute in these villages and centrality of water is a stark reality. Meanwhile, the cooperatives and BSI are able to provide certain services to its members such as seeds, bio-fertilizers; procurement for processing/ marketing and so on. These efforts could improve incomes and profits at the farmer/ cooperative level.

### SAGY Villages:

Samsad Adarsh Gram Yojana (SAGY) is a new scheme by Government of India. As per this scheme, each Member of Parliament will adopt a village and make it a role model village. WASSAN started working with two such villages (Veernapally and Patnapur) which are adopted by Shri B Vinod Kumar, Honorable Member of Parliament (Karimngar) and Mr Godam Nagesh, Honorable Member of Parliament (Adilabad) respectively. In these villages, WASSAN team conducted series of participatory exercises and developed an inventory of problems and potential solutions/ actions. As these action plans are expected to be implemented by converging all on-going government schemes, the funds are expected to be mobilized from government schemes. However, in reality, there is a delay in allocating fund and also ensuring the action on the ground. Meanwhile, WASSAN facilitate several actions in these villages such as crop water budgeting exercise; shifts in cropping pattern changes; establishing Climate Information Center; formation of farmer's cooperative and so on.

These villages provide an opportunity to sow case some of the good practices and ensure that they get attention of the policy makers such as honorable Members of Parliament. Once a good idea is made visible, there is a possibility of taking this forward to policy and programmatic dimensions. WASSAN is in the process of working at field level at this point of time, in these villages to demonstrate the feasibility of good practices in these villages. Next step should be to move forward on policy and programmatic directions.

### Green Audit of MGNREGS:

This is an initiative of UNDP. The purpose of conducting pilot of Green Audit was to evolve a set of tools/ methodologies/ protocols for assessing the environmental services by Mahatma Gandhi National Rural Employment Guarantee Scheme. Ministry of Rural Development, Government of India collaborated with UNDP for developing these tools/ methodologies/ protocols for assessing green outcomes of Mahatma Gandhi National Rural Employment Guarantee Scheme. As government is making huge investment on this prestigious scheme each year, it is important to find out if this scheme is also contributing to the environmental sustainability and ecological balance, apart from generating wages. WASSAN and WASSAN Foundation were identified as resource organization for this pilot. Though the discussions/ thinking process began about two years back, the formal launch of this pilot was initiated only in Dec 2015. The pilot project is expected to field test the methodology/ tools in seven aaro-climatic zones of India – Andhra Pradesh; Uttar Pradesh; Jharkhand; Maharashtra; Gujarat; Rajasthan and Jammu Kashmir. WASSAN team started working on the literature review/ initial documentation for developing a conceptual framework. WASSAN also stated inviting other agencies who could be part of this process. It is expected that this pilot would be completed by June 2016. This would be followed by series of training programs in different parts of the country for spreading the knowledge, skills and related systems/ protocols for conducting/assessing environmental services of the Mahatma Gandhi National Rural Employment Guarantee Scheme.

### **Resource Book for MGNREGS**

Ministry of Rural Development, Government of India developed "Samardhya", a resource book on technical issues and other aspects of Mahatma Gandhi National Rural Employment Guarantee Scheme. This is a detailed resource book and largely meant for technical staff of state governments. As there are large number of local functionaries, who do not have necessary technical skills/ knowledge, this resource book is not very useful. Given this background, GIZ took initiative to develop a simplified version of "Samardhya" for functionaries working at different levels (technical and non-technical). This simplified version is expected to support the process of improving quality and durability of assets under Mahatma Gandhi National Rural Employment Guarantee Scheme. GIZ identified WASSAN for taking up this responsibility of developing a simplified version of Samardhya. Apart from this, GIZ also wanted to develop few resource material, modules, posters, picture cards for conducting training programs/ awareness programs related to durability/ quality of assets and environmental benefits of Mahatma Gandhi National Rural Employment Guarantee Scheme. WASSAN and WASSAN Foundation took up this responsibility and completed the assignment during 2015-16. The final version of these outputs are expected to be published by GIZ, after a formal approval by MoRD, GoI. WASSAN also conducted a training of trainers on this theme – Use of Resource Material in Training Programs of MGNREGS. This program was hosted in NIRD, Hyderabad.

### Case Studies on Bio Diversity and Conservation - Partnership with IFHD:

Indian Foundation for Humanistic Development (IFHD) is associated with IUCN and other agencies for conducting series of learning events/ programs under

 "Leaders of Nature" initiative. For facilitating these events, IFHD desired that WASSAN develops case studies that showcase good practices on the community based conservation and biodiversity promotion in the country. These case studies could also be funded/ supported by corporate groups. WASSAN has necessary expertize on this subject and stated working on this theme since Oct 2015. An inventory of case studies was developed to capture the diversity of experiences in the country. Fields visits were conducted to selected agencies. A writeshop was conducted during Jan 2016, in which representatives of agencies that closely work corporates and corporate agencies participated. The writeshop participants gave feedback on the draft case studies and provided useful inputs for improving the same. About 22 case studies are developed as part of this process, which showcased the exemplary experiences of promoting biodiversity and conservation. These case studies ranged from pure-biodiversity (wild life); awareness related to biodiversity; sustainable production systems that positively impact conservation/ biodiversity; promoting biodiversity in urban context, etc. Visiting these sites, interacting with the promoters of these experiences and finally documenting their experiences is an inspiring and humbling experience.



# Institutional Landscape of WASSAN

### WASSAN Foundation – WASSAN Group of Institutions:

As a network based resource support organization, institutional landscape of WASSAN is continuously evolving. Emerging from Center for World Solidarity, WASSAN has the luxury of other solidarity institutions such as Center for People's Forestry; Center for Sustainable Agriculture and Center for World Solidarity. Large number of partner NGOs who are common to the solidarity institutions and also exclusively with WASSAN are part of this partnerships. WASSAN promoted WASSAN Foundation, a "not-for-profit" company in Aug 2012. WASSAN Foundation is expected to supplement WASSAN's efforts on those areas, where WASSAN (as a public charitable trust) has certain limitations. WASSAN and WASSAN Foundation have evolved a "Principles of Partnership", which provide broad framework collaborative agenda. Dr NK Sanghi and K Suresh were the founding directors of WASSAN Foundation. During 2015, Shri P Mohaniah (Retired CGM NABARD) and Shri N Vishram (Software Expert and Entrepreneur) joined WASSAN Foundation as directors. WASSAN Foundation is benefitting from the guidance and support from its directors on various issues/ strategies/ programs. Several projects are jointly implemented by WASSAN and WASSAN Foundation. The development sector is slowly realizing the strength of "WASSAN Group of



Institutions" consisting of WASSAN (A public charitable trust) and WASSAN Foundation (not-for-profit company).

### **Co-construction of WASSAN**:

Given the dynamic nature of voluntary sector, policy framework for voluntary sector in the country/ world over, partnerships with governments, emerging corporate sector in development, WASSAN embarked a co-construction process of WASSAN Group of Institutions. This process was expected to prepare WASSAN and its team to prepare itself and position itself strategically advantageous location. This process began in 2012 and got firmed up by Mid-2013. Mr Gagan Sethi, Trustee of WASSAN guided this process. As part of this, WASSAN is organized into three nodes – Node of Knowledge; Node of Change and Node of HID. There were several sub-nodes within these. A strategic leadership team was constituted by following formal procedures. Anchors for nodes/ sub-nodes were identified.

During 2013-16, the recommendations of co-construction processes and decisions of this process were implemented to the extent possible. While this helped to orient the teams and trigger local/ node (sub-node) centric action; helped to trigger new leadership in the organization; give a strategic direction to the programs/ agenda, there were also several challenges. Some of the subnodes could not find an anchor and some anchors could not find sub-nodes. Some sub-nodes were found to be unviable as they are not able to generate action plans; agenda; partners and resources. As a result some of these subnodes had to be wound up/merged into other sub-nodes. This happened with Node of HID; Sub-Node of Fisheries; Livestock and Sub-Node of Training; etc. Some nodes/ individuals could not change their way of working/ thinking and others could not support them adequately in the process of change. Member of Strategic Leadership Team were also finding it too difficult to transform the culture of the organization, entirely. There were reluctant partners in the change, while there were enthusiastic go-getters in this team, as a result of the new opportunity they got from the establishment. It appears that there is a need for re-looking at the systems and organogram of the WASSAN landscape, after executing the co-construction process of WASSAN for last three years.

### **New Board Members of WASSAN**:

Dr Kalpana Kannabiran (Council for Social Development, Hyderabad); Mr K Suresh (Manchi Pustkam Hyderabad) joined WASSAN trust as trustees in 2015. With these new members, WASSAN has 9 members on its board.

### **New Policies of WASSAN**:

As part of Co-Construction process, several new policies were conceptualized, drafted, discussed and finalized/ approved by Board of WASSAN during 2013-16. These policies are expected to improve the efficacy, efficiency, transparency and functional capabilities of the organization, by providing congenial working environment, for the team. These policies are – WASSAN Financial Manual (Feb 2014); Policy for Creating Women Friendly Working Environment and Promoting Culture of Respect in WASSAN (2015); Endowment Policy of WASSAN (2015); Wage Policy of WASSAN (2013). These are available on WASSAN web site.

### **WASSAN Annual Network Meetings**:

Generally, WASSAN Annual Network Meetings take place during July of each year. These meetings provide an opportunity to exchange thoughts; experiences and collectively push new ideas/ good practices into mainstream government programs and also forge new partnerships between/ among several partners. This is also a platform for advocacy for CSOs, where senior government officers play an active role in shaping up the new policy for the programs. After bifurcation of Telangana from Andhra Pradesh in June 2014, the entire administration in both the states was busy with several issues that are a fallout of the bifurcation. Many departments did not have adequate officers and there was some kind of confusion for some time. With this background, the Annual Network Meeting of WASSAN was organized on 19th and 20th Dec 2014. The 20th Dec 2014 was also 15th Anniversary of WASSAN. (20th Dec 1999 to 20th Dec 2014).

The theme of this ANM 2014 was - "In search of Water Alternatives". As both the state governments were planning major water centric programs, experiences from other states on such ideas were relevant of AP and Telangana. Resource persons and dignitaries such as Dr V Malla Reddy, Chairman, WASSAN and Director, Accion Fraterna; Prof. Kodandaram; Ms Nafisa Barot, PRAVAH and Uttan, Gujarat; KJ Joy SOPPECOM, Pune; Mr Vikram Cll, Hyderabad; Shri Subhash Chandra, NABARD, Hyderabad; Shri SP Tucker, Principal Secretary (Planning and RD), Government of AP; Shri HNR Rao, IGWDP, Hyderabad; Dr C Suvarna, Special Commissioner, Rural Development, GoAP; Dr Rukmini Rao, Gramya and Trustee, WASSAN; Shri Vidyasagar Rao (Ex-CWC & Adviser to GoT for Irrigation) Shri Jagadaananda National Social Watch, New Delhi; MV Sastri (CWS); Dr GH Shah, CEO, SLNA JK State; Dr CP Reddy, DoLR, MoRD, Gol, New Delhi; Murali MARI, Fansa Network; Mr Sesha Rao, CCD, Adilabad; Dr Raji Reddy, Director, Research and Extension, PJTSAU; Ms Vasundhara, Expert on Cooperatives/ Peoples' Institutions; T K Sridevi, Commissioner, R&R Dept, Govt of Telangana; Ch Ravi Kumar; Gandhi Babu ASDS, Khammam – participated in the ANM 2014 and shared/ facilitated various topics related to the theme of the



ANM 2014. During this meeting, four volumes on "Water Watch - Social Watch AP" authored by MV Rama Chandrudu were released by Dr Jagadaananda, National Social Watch; Shri MV Sastri and other representatives of National Social Watch.

WASSAN ANM 2015 was organized in 15th and 16th Sep 2015. The theme of this event was on "What should change? What should continue? Consultations on Changing Climate". This theme was relevant as the central government policies are drastically changing as per the recommendations of 14th Finance Commission. This has implications on share of funds from central government on various government schemes such as Integrated Watershed Management Projects. While climate change and its implications are becoming a reality, the policies are also changing with equal dynamism. However, these policies are not able to adhere to certain core principles/values. A reflection on this theme is the core of this ANM 2015. Shri MV Sastri (Convener, Centre for World Solidarity); Mrs Renuka Sanghi; Dr J Venkteswarulu (Ex-Director, CAZRI); Shri SP Tucker Principal Secretary (Plg) GoAP; Dr V Malla Reddy, Chairman, WASSAN and Director, Accion Fraterna; Dr S Wani, ICRISAT, Hyderabad; Smt. V Usha Rani, IAS (Director General, MANAGE) participated in this event and shared their thoughts on climate change related issues and need for continuing certain core principles. Shri SP Tucker requested the network members to give suggestions on 'smart villages' and "Rayalaseema Program" so that Government of Andhra Pradesh could take them forward. These points were thoroughly discussed by network members and a concept note was prepared and presented to Government of Andhra Pradesh. A compendium of articles "Knowledge of Change" was released during the ANM 2015. Several colleagues, friends and followers of Dr NK Sanghi came together to write these articles for this book, on various issues that are close to Dr NK Sanghi. Mrs Renuka Sanghi was present during this book release in the AMM 2015.

### WASSAN Web Page:

WASSAN web page was designed long back. It was one of the most visited site by several development practitioners. It contained information and latest developments and soon became a favorite site for many. However, it required a face lift and should be more user-friendly. Considering this, WASSAN web site was revamped in 2015. The content is simplified and better organized. It could be further made more attractive and be more savvy. There is also a facebook account now for WASSAN. This web site also provides brief details of WASSAN Foundation. There are several photos/ visuals that are published on the photo gallery, which give a glimpse of WASSAN's action. Any web site is attractive, only when it is regularly updated and latest news is presented on the pages. Though WASSAN is a happening place, not many events find space on the web page. WASSAN team is not every eager to develop content and share it on the web



page. There is a need for many at WASSAN to think of its fans in different parts of world and find out ways and means of reaching out them. There is also an attempt to develop WASSAN intranet, which would be used by WASSAN team for keeping all data bases in one common place and manage projects.



