

“So, Ms. Alyssa, apart from your internal evaluation reports do we have any other evaluations to substantiate the opinion- that the Intelligent Water Management (IWM) project is beneficial for the populace and is working on the ground?” asked Ms. A. P. Buch, the Secretary¹, Ministry of Rural Development, Government of India (GoI).

“Yes, positive evaluation work by WHO² Geneva, a perception study on water reuse by DFID³ and the creation of a guidance manual on IWM by ERI⁴ resulted in state government interest in the program in 2006 and a technical proposal by the PHED⁵. By the end of 2006 the program was the subject of an International Learning Exchange (ILE) program and was visited by international experts of the Middle East, Africa and Europe. And all of them gave favorable reports.” replied Alyssa.

“Well, that looks impressive, what is your own opinion about the project? Should it be upscaled throughout India?”

After a drawn out thoughtful pause, “Yes, I think it should definitely be”.

Background

International Organization for Children and Women (IOCW), with its headquarters in Geneva, is one of the largest multilateral organizations supported and respected by most countries throughout the world. It has projects on alleviation of poverty, health issues and basic human rights spread all over Africa and Asia. Its donors are basically USA, Japan and the European Union.

Dr. Harry Hamilton joined IOCW in 2004 as an Associate Officer after completing his doctorate in Environmental Sciences from the University of Nottingham. With a plethora of research papers behind him, Dr. Harry was highly respected in his field. After working for a year in the WES⁶ division of Somalia, he was promoted and sent to India. His area of operation included Madhya Pradesh in Central India.

Central India with all the complexities⁷ of India duly in place was a water scarce area. Its rural populace was one of the poorest in the World and performed badly on most of the indicators of Human Development Index (HDI)⁸.

Dr. Harry after a month long tour of the region realized that solving water problem was one of the most essential steps before any improvement in the living conditions took place. He had a solution in mind that involved Water reuse and rainwater harvesting. With the help of ERI he developed a technically robust system. For this he first wanted to start implementing this system in the ashrams⁹ of Madhya Pradesh (figure 4).

After approval of his plan of action, from the superiors, the first few pilots were tested and evaluated in tribal areas of Madhya Pradesh, with the support of the State Government. Within a few months the pilot said to be highly

¹ Secretary, GoI is one of the senior most Indian Administrative Services (IAS) Officers. The IAS is the most important administrative service of India, both at the central and state level, where these officers hold all strategic administrative positions. *Those dealing with India have the opinion that the power of the IAS officers in the Indian polity is huge.*

² World Health Organization

³ Department for International Development, United Kingdom

⁴ Environmental Research Institute is one the premier research institutes promoted by the GoI.

⁵ The major activity of the Public Health Engineering Department, Madhya Pradesh, is survey, investigation, preparation and execution of water supply and sanitation schemes throughout the state. See Appendix A.1

⁶ Water, Environment and Sanitation

⁷ The Caste system is the biggest complexity in India. “Defined by many specialists as a system of elaborately stratified social hierarchy...much the same significance in social, political and academic debate as race in US, class in Britain and faction in Italy...Nevertheless, if one is to do justice to India's complex history, and to its contemporary culture and politics, caste must be neither disregarded nor downplayed - its power has simply been too compelling and enduring” (Bayly, 1999).

⁸ With HDI of 0.619, India ranked 128th out of 177 countries mentioned in the Human Development Report (HDR, 2005)

⁹ Ashram schools are residential schools for tribal children. Ashram schools generally provide admission to children from habitations at least 6-8 km. away from the school. If children from nearby villages are admitted, they are not provided with boarding. The curriculum of Ashram schools includes agriculture and other life skills in addition to general subjects. Many parents in Jharkhand, Orissa and Gujarat preferred Ashram schools as they provided free food, clothing and boarding. Some parents said that education of their wards in Ashram schools was not obstructed, when parents migrated for work. (Jha & Jhingran, 2002).

successful could be seen as being replicated in the rest of Central India by the Government itself (figure 1). Within IOCW it was projected as a model project implementation. IOCW pushed Government to make it part of the programs for national water policy implementation (see Appendix A.2). Both the state and the Central Government were keen to promote such a successful project which had emerged in a small span of time. Dr. Harry, called the rising star of the organization, was expected to be promoted to a senior position in one of the fastest promotions in IOCW history¹⁰.

Along with that, IOCW, decided to document the progress of the successful IWM project by calling in temporary consultants from Massachusetts Institute of technology (MIT), under the supervision of Dr. Harry himself.

These two development management Doctorate students, Alyssa and Manya, working as short term consultants came across surprising facts about Intelligent Water Management (IWM) (see Appendix A.3) project which was said to be highly successful. Their foremost task was to document the stages through which the project progressed so that it can be shown as a model for future project implementations by IOCW and sister organizations.

Organizational Structure

IOCW, India, with its central office in New Delhi worked through its field offices in 15 states of India. New Delhi office directly reported to Geneva Headquarters. New Delhi office was headed by an Executive Director.

The whole organization worked through its two main service systems- the core services and the supporting services. The core services (grade C officers) worked through 7 verticals: Child Protection, Reproductive & Child Health, Nutrition, Education, HIV/AIDS and WES (Water Environment and Sanitation). The supporting services (grade S officers) were divided into 5 verticals: Administration, Finance, Communication, Information Systems and Procurement.

IOCW recruited employees through international selection procedure. Generally specialists with 1-2 years of relevant work experience joined at the Associate Level (C4 and S4 level) at Field Offices. They reported directly to the Officer (C3 and S3 level) of their vertical. For example, Associate WES Officer reported to the WES Officer. Each vertical also had general services staff hired on temporary basis to assist these permanent officers. Apart from these experienced specialists were hired to act as consultant for specific projects.

At the state level, the C3 Officer, had to coordinate all activities with his counterparts from the supporting verticals. These coordination activities were supported by a Programme Officer (a C3 officer) who reported also to Chief, field (figure 3). The level 3 Officers reported to the Chief, field Office and also to the Chief of their vertical sitting at the Central Office. All projects originating at the level 4 had to pass through both the Chiefs. At the central level the coordination activities were supported by Chief, Administration. The rest of the structure at the Central level reflected the structure at the state level.

The core services were the verticals based on the development goals the organization wanted to fulfill through its Country Program¹¹. There could be certain overlaps in work profile in some states and depending on local projects the duties varied from state to state.

¹⁰ Based on informal interviews with other IOCW officials.

¹¹ Country Program is a period plan (5 Years for IOCW) where certain development goals need to be fulfilled by the present organization in that country in the manner specified in the period plan. International Organizations with country programs don't necessarily have permanent organizational presence and can wind up the operations in that country if they feel their presence won't help in its larger goals or the host country.

Duties of WES Officer, Bhopal were.

WES Officer: To contribute to designing and implementing the scaling up of the WES projects in Schools and Total Sanitation Campaign (TSC) and IWM activities in Madhya Pradesh. To the extent possible, interventions are to be informed by evidence of people's knowledge, attitudes and practices relating to water supply, sanitation and hygiene, especially of women, children and the poor. Interventions are to be designed to promote social inclusion and reinforce IOCW-supported initiatives in other sectors.

The profiles of the major supporting verticals are:

Programme Manager: To coordinate the operational aspects of the programme for efficient and effective programme implementation; leverage the coordination of convergent districts and presence of the District Facilitators to give better results for women and children

Communication Officer: Responsible for facilitating and influencing the State Government's policy, planning, implementation, monitoring and evaluation, for an assigned programme or specific projects within one State in India.

Finance Officer: Responsible for approval and sanction of funds for program implementation by each core vertical while conducting timely audits for the utilization of the same. The approval for extra funds apart from the budget provided had to come from Chief, Finance and Chief, WES.

Procurement Officer: Responsible for procuring the equipments and other necessary materials after getting requirement from the WES Officer and sanction of funds by Finance Officer from the WES account.

After level 3, the promotion could take any of the 2 tracks. The officer could try to get promoted to executive management side by being the Chief, Field Office (track 1) or could try for the Chief, Vertical (track 2). In track 2 he would finally get posting for level 1 in Geneva for that vertical. While in track 1, he could get the post of Executive Director. Generally track 1 promotion was considered more prestigious than track 2.

Annual evaluation of each officer is done by his superior to whom he reports. At level 3 the evaluation is done by Chief, field office and the level 2 officer of that vertical. The evaluation is done mainly based on 3 parameters:

1. Personal Development: Highly subjective evaluation based on general skill development. Interpersonal skills, etc.
2. Junior staff development: Highly subjective evaluation based on general skill development. Interpersonal skills, trainings provided, etc.
3. Country Program Development: A few general metrics are
 - a. Status of Old projects and how much upscaling has been done
 - b. Number and status of new projects started
 - c. Promotion of projects through government intervention, etc.

IOCW followed the equivalent Human Resource structure as followed by ICSC (International Civil Service Commission) for the UN Organizations. For each higher post there were heavy increases in base pay. While, "Within-grade increments are awarded on the basis of satisfactory service" (UNCS, 2006)

Brief Country Program Implementation Structure

The regular work of IOCW country program was a collection of sector specific projects. Some projects were state specific while some were upscaled to National Level. The upscaling was done on the basis of favorable reports of the state project.

Annually some fund was earmarked for Research & Development, which was used by C3 (and above) officers to try out new projects. These projects were transferred to sector specific general budget heads after their efficacy was established. But the upscaling was done with the help of the Government of India (GoI) and the funds for national projects provided by IOCW were primarily to streamline the transfer of projects from IOCW to the government.

This scenario was different from most countries in which IOCW was working. The thinking at Geneva level was India was emerging as an economic powerhouse and hence needed only ideas to improve the situation of children and women. This meant the primary goal of IOCW, India, was to try out new projects and after their ability was established, to upscale these at a national level with major funds sourced from GoI. After that it was slowly transferred into GoI hands. Upscaling of a state project to the national project was considered a highly prestigious achievement by most officers because of India being a major developing country.

General Project Life cycle (from idea to national program)

There were several essential steps through which a concept travelled before it was recommended by IOCW for policy incorporation in the Indian government system or for being upscaled as a national project (figure 5). The first phase was **concept development**, which started by partnering with reputed research institutes for technical modeling. Proposals and suggestions for construction and management were developed with the help of partner NGOs who understood the local conditions and had a grassroots presence. Along with this, advocacy for the project took off simultaneously with the senior state and central government officials.

The second phase, which was the evaluation phase, consisted of field testing at sites meeting certain selection criteria. The evaluation was mostly done by officers of IOCW. Special care was taken that no one from the same vertical was the evaluator for the project.

After the successful development of the pilot project, the concept travelled through **two simultaneous paths of policy and program**. At the one end efforts were generally made to include all the parts of the concept in the policy framework. At the other end, efforts were made to upscale the pilot to a national level program. These two developments went hand in hand, so that the policy inclusion facilitated the actual implementation of a large-scale program on the ground. In order to achieve this goal, the agency first determined the key individuals in the government system to influence the adoption of both program and policy, and provided them with the appropriate advocacy materials and technical reports emerging from the evaluation phase.

People and organizations:

Dr. Genessa Giorgi was the present Executive Director of IOCW, India. Dr. Rachel Rosenheck was the chief, WES. Dr. Umaru Obasanjo was the Chief, Bhopal Field Office. Mr. K. G. Saxena was the head of NGO – Madhya Pradesh child and women upliftment organization (MPCWUO). He was a retired IAS Officer of Madhya Pradesh Cadre. 17 small NGOs from all over the state of Madhya Pradesh worked under the aegis of MPCWUO which acted like an umbrella¹² NGO. The board of directors and management of MPCWUO consisted of retired senior IAS officers and

¹² This structure helped these NGOs to take up their matters with the state government and other international agencies in a coordinated way.

some renowned academicians. Most of the present incumbents in the MP Administrative circles were former colleagues of these people.

History of the program:

Water scarcity problems especially affect the rural population, which is 73.33% of the total population in MP (Census, 2001), raising the burden of diseases and mortality. The effect is harshest on those that are already poor and often excluded from the rest of the community such as Scheduled Tribes (ST), Scheduled Castes (SC), and Other Backward Castes (OBC). The tribal and SC population together cover 35% of the Madhya Pradesh total population. A large percentage of these tribes are concentrated in western MP, especially in the districts Dhar and Jhabua, which both have a tribal population higher than 50% (GoMP, 2002). Amongst these the tribes, Bhils and Bhilalas are the dominant groups along with Pateliyas (Russell, 1975).

The IWM program was developed (figure 6) by IOCW, Bhopal, in conjunction with ERI in 2005 in order to reduce fluoride contamination and water scarcity within marginalized communities and promote sanitation and health issues. Thus the initial target of providing safe drinking water and increased ground water availability through IWM were ashrams.

The main components of IWM are greywater reuse and rainwater harvesting. Greywater reuse describes the process by which bathwater is treated through a simple filtering system, and then reused for flushing of toilets and irrigation purposes. Rainwater harvesting is the collection of rainwater from a flat clean rooftop into a water storage tank in order to dilute fluoride-contaminated drinking water.

Additional expected impacts include reaching the most excluded parts of the community, raising awareness about water conservation, improving educational indicators, and demonstrating that IOCW is able to leverage government funds (figure 3) for innovative concepts.

To target these impacts the concept requires funding, equipment, training, staff and labor as inputs. The subsequent implementation of IWM in selected ashram schools includes training sessions for different stakeholders, approval from the stakeholders, the actual construction of the physical structures, the creation of a Water Safety Club (WSC) among the students, continuous Information, Education and Communication (IEC) activities, system maintenance and monitoring. All of these activities are supported by a partner NGO on the ground.

Findings:

When for their first meeting with Dr. Harry they were ushered inside his room, they found the walls plastered with cuttings from national and regional dailies talking about him and his project, which was definitely impressive for a newcomer. As for Dr. Harry himself, in the words of Alyssa, “He seemed quite young yet dynamic for his job profile. Comparable to any current Hollywood actor, more than 6 feet tall, blonde hair, blue eyes, aquiline features with a permanent smile fixed on his face. He had that persona where the person facing him would naturally assume that this guy knows what he is talking about. He had that aura of being a leader. He would agree to most negative things anybody said, remolded it according to his opinions and threw it back as if that is what the offender meant. Unlike his colleagues he looked more like a top corporate management guy.”

Dr. Harry began with, “This project is close to my heart. Not because it is my baby. Not because it has brought respite to the poorest of the poor. But because I have seen how this project has fulfilled in a wholesome way the implementation objectives we stand for, i.e. **participatory approach, enhancing social inclusion and thus bringing the maximum social impact in a sustainable way**¹³.”

¹³ See Appendix A.4

He continued, “As you know, IOCW closely resembles the functioning and objectives of UNICEF and we are proud of it, since we are achieving that with lesser bureaucratic set up. And, for the matter of you starting the work, I propose you meet some of the top state officials who know about the program. You would get a nice overview. I shall arrange the meetings.”

The next important meeting was with Engineer-in-chief¹⁴, PHED. On the topic of IWM he started with, “I think water problem is one of the most important problems being faced by this country. Especially the marginalized communities and this is one of the most important steps in resolving that problem.”

Manya asked, “Do you think it is more important that the government sets up drinking water supply and not try to resolve the crises by these other smaller impact projects.”

“No, we are achieving whatever targets we are provided with. But whatever is being provided gets wasted. We have to stop this. And IWM is the savior for the community. This has been a success for PHED which has now plans of implementing this in all the schools of the state. I have also been invited by Dr. Harry to Geneva to present in a conference how we can achieve success in water conservation using these. You waste water and government provided water is not the solution.”

Similar views were expressed by Mr. Baidya, Tribal Commissioner¹⁵, Bhopal region. “When I first went with Dr. Harry to the school where IWM was implemented I was pleasantly surprised to see the faces of happy tribal children. Immediately I realized that something revolutionary was taking place which was also established by the reports from ERI, our most prominent research institute, that how water was being saved.. I have instructed my tribal department to help IOCW in all its pilots and as quickly as possible start implementing this in all ashrams. I have even been invited by Dr. Harry to present this innovative project in the conference on development issues being faced by Asia Pacific region in Malaysia.”

Over the next 2-3 weeks they met various senior district and regional officials. The opinion invariably was positive. They started their first field trip with district of Jabalpur in the western MP. Their first interaction was with Assistant Commissioner, Tribal Welfare Department, Mrs. Kumudini Srivastava. She was all praise for the program following the same line as her boss Mr. Baidya.

After the interview a few wardens of the ashrams from the Jabalpur region came to meet her. While they were waiting for her, Alyssa introduced herself as a researcher and just as a matter of fact asked them what their opinion was of the IWM system. This interaction was an eye opening experience. One of the wardens replied, “It is a failed project. IOCW people don’t know what the current situation on the ground is. Have they asked for opinion of parents of the children? The children are supposed to clean the system. Whose parents are going to let their clean the system.”

Another warden continued, “Even if we provide a cleaner probably the IOCW people don’t know the social habits of the people over here. Most of the boys in India pee in the bathrooms while taking a bath. Do you think anybody would carry this water for flushing when it has just been cleaned by a mesh of stones? The girls even use the bathroom as a urinal otherwise. How feasible it is to change the habits of the children.”

The third warden added, “And you know the caste problem in India how can you expect children of some other caste to use that supposedly cleaned water of the other castes. Even if we provide flushes at certain places, still the children are hesitant to even touch that flush system. I am not saying the system is not good but without much effort

¹⁴ Engineer-in-Chief is the senior most technical officer of Public Health Engineering Department of the state. All implementations take place with his permission

¹⁵ Madhya Pradesh is divided into 5 administrative regions. Tribal Commissioner of a particular region is the senior most bureaucratic person for a particular department and all ashrams function under him and all schemes are implemented in ashrams with his consent.

it is being put. It would take a generation to change such habits and inculcate a different social behavior. The government is also implementing this at such a fast pace without consulting us.”

Although a bit taken aback, the assistant commissioner still smiled and intervened, “See all this is off the record. You know it very well; we get circulars from the top and just implement it. If the top bosses are so sure, who are we to put up problems? The problem is- the system and methodology needs continuous improvement. There was one a solar cooker project by IOCW. Thousands of solar cookers were installed by IOCW in hundreds of ashrams by us on the basis of a few pilots by IOCW and after getting us to spend crores the project was left for us by them. The system got lost in the daily routine of our department and ashrams. You need to continually advise us and the stakeholders involved when the baby was yours. It is not your resume where you keep on increasing the points by adding upscaled projects to your kitty. You are coming with development objective and this is not development in my view. Anyway this is for the top officials to decide.”

Alyssa being shocked by this development could only ask, “Do IOCW officials know about this and still do such a thing?”

Mrs. Srivastava replied, “Some of their officials know yet ignore the signs. Some don’t even know. They have such a long chain when the program actually reaches the ground. So much is at stake for so many. The NGOs have their money, government officials have their foreign jaunts and IOCW officials have their personal interests. And to control there is no external audit and surprise checks. A foreign person going to a ashram and watching the ashram already spruced up by NGOs is not the way to check. Here these wardens told you some truth otherwise many wardens have their motive of hiding this fact because they also get funds in the name of new projects and get to meet senior officials. Who would deny such an opportunity? Ultimately it is the responsibility of IOCW to develop some mechanism to get the actual situation on the ground.”

After this different kind of meeting, the two consultants decided that Manya who knew Hindi would get away from the group whenever inspecting the schools and talk to villagers and local people to get the real situation.

Excerpts from the report submitted to Chief, field office Bhopal

In our field visits to our utter surprise we found many of the ashrams where IWM was reported complete was still not complete or broke. This was truer for the government implementations and luckily not in IOCW implementations (which are less than dozen ashrams. The future for the program does not look good as having its own implementations in sound condition and of the government not in good condition doesn’t bode well for the program. A rethink should be done before suggesting it for further upscaling.

Upscaling to all schools:

Participation during the design phase: This was only found in IOCW/NGO implementations. However, in many new ashram implementations performed by the PHED in the Jabalpur area, the wardens, students and parents had not been informed about what was being implemented until it was already under construction. IEC (Information, Education and Communication) in these places was supposed to happen after construction.

However, even for IOCW implementations we are also concerned that this level of attention will decline beyond the pilot phase when visits to schools are at a maximum. There is already a difference in the level of participation between the first implementations and those that followed.

IEC for children in relation to IWM has shown to be very successful, but there is still a lack in proper IEC for adults. This IEC should be directed towards awareness and knowledge about the need for water conservation in the future. All stakeholders should receive IEC that is designed specifically for them. This

means: more technical IEC for engineers and more basic education for villagers. Many officials seemed only partially sure of the benefits of the program and had no reports, evaluations, or documents at hand.

Reaching the most excluded: IWM has so far been implemented primarily in well-functioning ashrams close to the district centers or main roads. During the pilot phase, this was in order to establish demonstration schools that can be used for exposure visits. IOCW's implementation ashrams were found to be in good condition, clean, and tightly managed, with strong leadership by the warden and functioning parent-teacher associations (PTAs). Interior ashrams (non-implementation) located far away from main roads were found in poor condition, in need of repairs, reliable staff, boundary walls, sanitation facilities and water sources. Because the program is supposed to cover 100% of ashrams in some districts, such as Jhabua, IWM is intended to eventually reach the distant ashrams.

There will be challenges in reaching this goal. Some wardens in the more remote areas of Jhabua stated that their first priority was fences around the ashram and toilets, which will be needed before IWM. Also, according to NGO members and government officials, there is resistance to providing the interior regions with services. Officials rarely visit these remote areas, and any assignment in the tribal region is itself widely known as a "punishment posting" for an official. NGO members also may be unwilling or unable to travel for hours on dirt roads to get to these ashrams, and initially some were reluctant to accompany the team members to conduct this research. There are also risks of violence and robbery in remote tribal regions of MP. However, these regions are truly the most vulnerable and must be included in the upscaling plan in a way, that IWM can properly function and bring the impact needed.

Reaching the most excluded is not an easy task, and it should be carefully considered before inclusion as a top priority. The goal should not be to implement IWM in every ashram in every state, but focus on the ashrams where it would really benefit those that need it the most. It should also be taken into consideration that the people that need it the most might not be able to benefit from it before other needs are targeted.

Social exclusion among tribes and castes During upscaling, IWM will likely encounter social tensions among castes. Some implementation areas of eastern MP already must confront such issues. Wardens in Jabalpur said that upper-caste parents will refuse to allow their children to clean the system because that work is meant for the lower castes. Also, different castes often use different water sources in rural India. While all ashrams are SC and OBC designated, within these groups there are still divisions into higher and lower caste. An aggressive IEC campaign for parents as well as students will be necessary to combat these prejudices even if cleaning tasks are reduced among students in the future. Wardens must also create mixed-caste groups of students and make sure the WSC is mixed-caste. New implementations in these areas should be closely monitored for discrimination along caste lines and a social evaluation performed in mixed-caste schools.

Upscaling to Household implementations:

Reaching the most excluded: A household greywater reuse system can be built for 845 rupees, which for a landless Bhil laborer is equal to about half a month's salary. Therefore it would not be possible for most of these families to have it in their home. The private household implementations are not affordable to the poorest and most excluded in the community.

Social exclusion among tribes and castes: In the hometowns of the students and community surrounding the ashram there is a bigger distinction between tribes, and the children would not play or speak with other tribes. Household interviews showed that this tribal distinction was very visible among adult villagers. Bhils, for example, are considered to be subordinate to Pateliyas and Bhilalas. Furthermore they are

considered by others (and to some extent even by themselves) to be less clean, illiterate, non-veg and more likely to drink alcohol. In the village context the selection of who gets financial support for the individual household reuse system may exacerbate social tensions and forms of jealousy. Care should also be taken to select grassroots motivators and other workers (laborers, etc) from different tribes and different status.

Sustainability

Water scarcity must reach a level critical enough to make users feel a demand for water reuse in order for the system to remain in use. In one ashram, the greywater was simply being washed out into the "garden" which consisted of some trees near a lake, because they had actually no need and demand for the implementation. This ashram seemed to have ample water supply already. We also encountered an ashram where they planned to turn the system on only during water scarce months of the year and otherwise leave it off, because they often had regular tap water supply. While this might be a practical way to use the system, it is not intended to be used this way and this would preclude the possibility of groundwater recharge through water saving throughout the year. In another ashram some staff members stated that the system was only turned on when visitors came.

However, with too little available water in the ashram, reuse becomes unfeasible: younger students may be bathing at a local hand pump instead of at one ashram like in Jhabua. The same is true for the potential of greywater reuse in private households. Families who have so little water at home that they go to the nearest water body to wash and clean do not produce sufficient greywater at their houses to keep the reuse system running.

Need should be established within both a lower and an upper boundary for water availability, a range in which the usage of the system becomes most likely. This will prevent using resources on implementing systems that will not or cannot be used.

After this report submission, Dr. Harry called an emergency meeting with them; “You people don’t know what you have done. Atleast the final report should have been given only after consultation with me. Chief is from the other vertical you should have understood that. Thankfully the relations of Obasanjo were good relations with Rosenheck. See a lot is on stake in this project. You guys also know how much your future assignments with IOCW and sister organizations would depend on your current level of work. Please redraft the report based on your correct perception”

This meeting left them wondering what should be their response in the meeting with the senior government officials in New Delhi.

Appendix A

A.1: Excerpt from the proposal

“The proposal has been prepared as per the discussions held in the chamber of the Engineer-in-chief, Public Health Engineering Department, M.P. Bhopal, Dr. Harry Hamilton, Project Officer, WES, IOCW Bhopal, and Executive Engineers from all over the state were present during the discussion. The scheme would be implemented in the list of hostels (Ashrams) provided by the Assistant Commissioners, Tribal Department.”

A.2: News excerpt from a prominent regional daily (May 15th, 2007)

Bhopal: IOCW Regional Director (South Asia) David Johnson made a courtesy call on Madhya Pradesh Chief Minister here on Friday. The Chief Minister told the IOCW delegation that several schemes are being implemented in Madhya Pradesh to encourage institutionalized delivery. David Johnson informed him that IOCW is willing to extend help to Madhya Pradesh Government in its schemes for the children and women's development. Special cooperation is being made by IOCW in the schemes being run for small children at Guna and Shivpuri.

The Chief Minister in turn informed the IOCW team about the projects being conducted in the state for women's empowerment and children's development, including the IWM scheme being run with the help of IOCW. He also gave away presents to the delegates as mementos on behalf of Madhya Pradesh government.

Those present on the occasion included IOCW (India) director Dr. Genessa Giorgi, IOCW's Madhya Pradesh representative Dr. Umaru Obasanjo and Chief Minister's Secretary.

A.3: IWM program

The IWM program of IOCW is meant to cater to the primary need for safe and sufficient water supply, while being fully in consonance with the objectives laid out in the policies¹⁶ of the government. The main components of WWM are greywater reuse and rainwater harvesting. Greywater reuse describes the process by which bathwater is treated through a simple filtering system, and then reused for flushing of toilets and irrigation purposes. Rainwater harvesting is the collection of rainwater from a flat clean rooftop into a water storage tank in order to dilute fluoride-contaminated drinking water.

According to the particular system design, several additional components can be used to address the specific needs of an ashram. These components are: greywater treatment system, greywater reuse, rainwater harvesting, fluoride dilution, groundwater recharge, water safety plan, play-pump and hand washing units (figure 4).

A.4: The main pillars of participatory approach, social inclusion and sustainability according to IOCW are (these excerpts have been taken from various IOCW documents which have based on UN and other international definitions):

Participation is one of UNICEF's values, which they define as follows:

[Participation is] the process of sharing decisions which affect one's life and the life of the community in which one lives. It is the means by which democracy is built and it is the standard against which

¹⁶ The National Water Policy 2001 of GoI states that, “Special efforts should be made to investigate and formulate projects either in, or for the benefit of, areas inhabited by tribal or specially disadvantaged groups such as socially weak, Scheduled Castes and Scheduled Tribes.”

democracies should be measured. . . . [it is] the “right” of all children to have their opinions taken into account when decisions are being made that affect them. (SOWC, 2003)

A participatory process is, in brief, the transfer of information from one who knows (insider, local) to one who does not know (outsider, expert) (UNICEF presentation, 2005). In development programs, a participatory approach helps to create sustainable change at the grassroots level and is considered good practice. When used right it can create ownership, build capacity, make sure a project is relevant and empower the people involved. Many development scholars argue that top-down policy, meaning planning from outsiders without input from the community, rarely meets the needs of the targeted people and is regarded to be weak in revealing local complexities. (Gosling and Edwards, 2006).

In the context of the IWM program, it has been argued that participation means the inclusion of all relevant stakeholders from the beginning and in every step of the process. As the primary stakeholders, students and ashram staff should have the chance that their voices are heard before any major decision concerning a IWM project is taken. This includes input on construction, design, and throughout the implementation process.

Social inclusion is a major aspect of UNICEF’s policy under the new country program for India 2008-2012:

Social Inclusion is one of UNICEF’s central areas of work. [...] [UNICEF must ensure] that all our policy and program actions are fully informed of the dynamics of social inclusion that result in persistently unequal outcomes for different groups disadvantaged by caste, tribal, religious and other identities, as well as by geography and other circumstantial factors. (UNICEF India Country Director, 2006)

The concept of social exclusion exists widely within Indian society; SC, ST and OBC are defined as excluded groups and are regarded as most vulnerable. Within each of these groups, children, and especially the girl child are particularly vulnerable.

Analyzing social inclusion in the context of IOCW’s IWM program, means examining on a district level whether the most excluded or vulnerable ashram are receiving the benefits of the program. At the ashram level, the differences among tribes and between tribal and non-tribal students should be assessed whether the IWM system exacerbates any social tensions within the ashram. To ensure a maximum social benefit, IOCW’s IWM program should support the most vulnerable elements of society and lead to more equity within the society.

Because the program is supposed to spread from ashram children to their families and communities, aspects of household implementations and of ashram-community relationships should be kept in mind.

Sustainability: There are several indicators that can be used to measure the sustainability of a project over the long-term. The indicators for the sustainability of the IWM program are based on the World Bank’s evaluation indicators (OED Online). While this is in no way an exhaustive study of sustainability, these criteria will be essential for the proper functioning of the system during the upscaling period and into the foreseeable future: Demand and need should be high; social acceptability should be sufficient; responsibility for the operations and maintenance of the system should be clearly defined and duly followed; responsibility for regular monitoring should be clearly defined and allocated to the competent authorities and departments; and the program should show resilience to institutional shifts and stakeholder turnover

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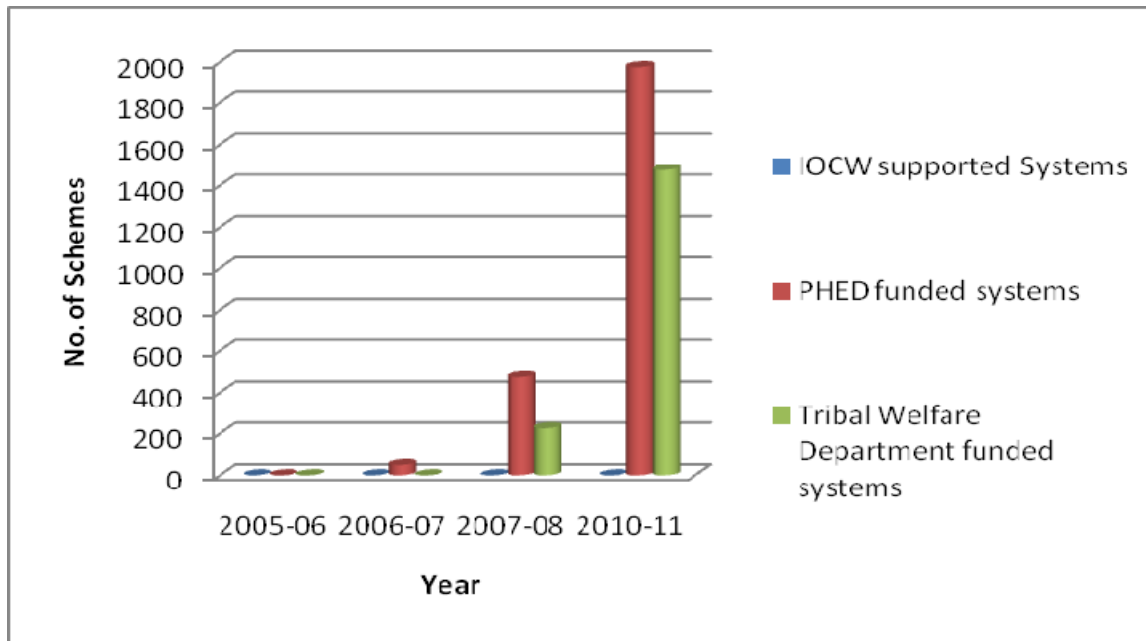
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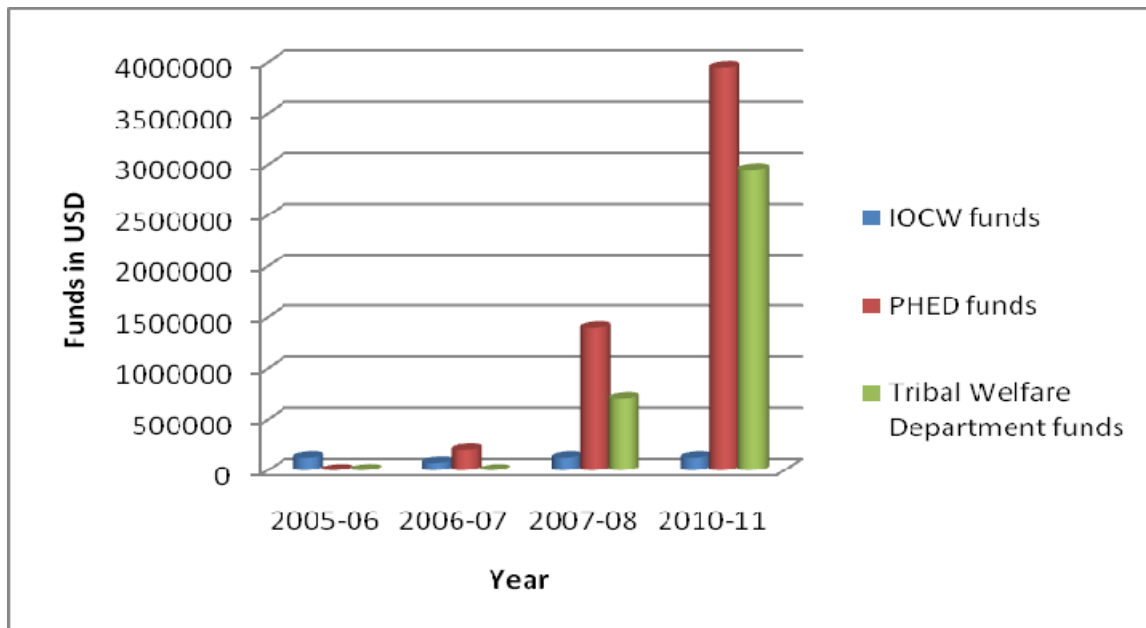
Figures

Figure 1: Number of intelligent Water Management schemes (present and future)



(IWM, 2006)

Figure 2: IWM- Leveraging Government Funds (current and expected)



(IWM, 2006)

Figure 7: Intelligent Water Management System

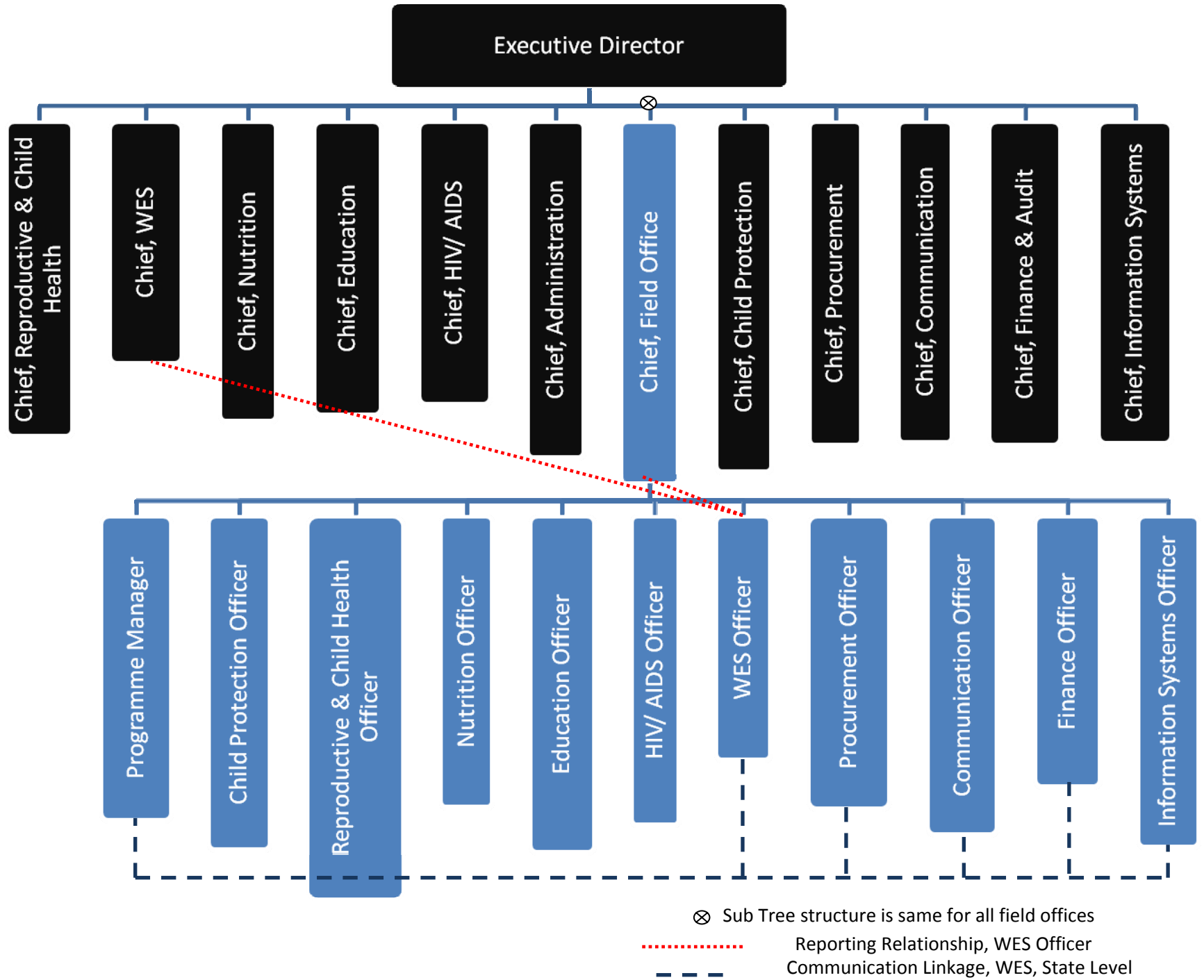


(IWM, 2006)

LEVEL 1

LEVEL 2

LEVEL 3



⊗ Sub Tree structure is same for all field offices

..... Reporting Relationship, WES Officer

- - - - - Communication Linkage, WES, State Level

Figure 3: Hierarchical Relationships

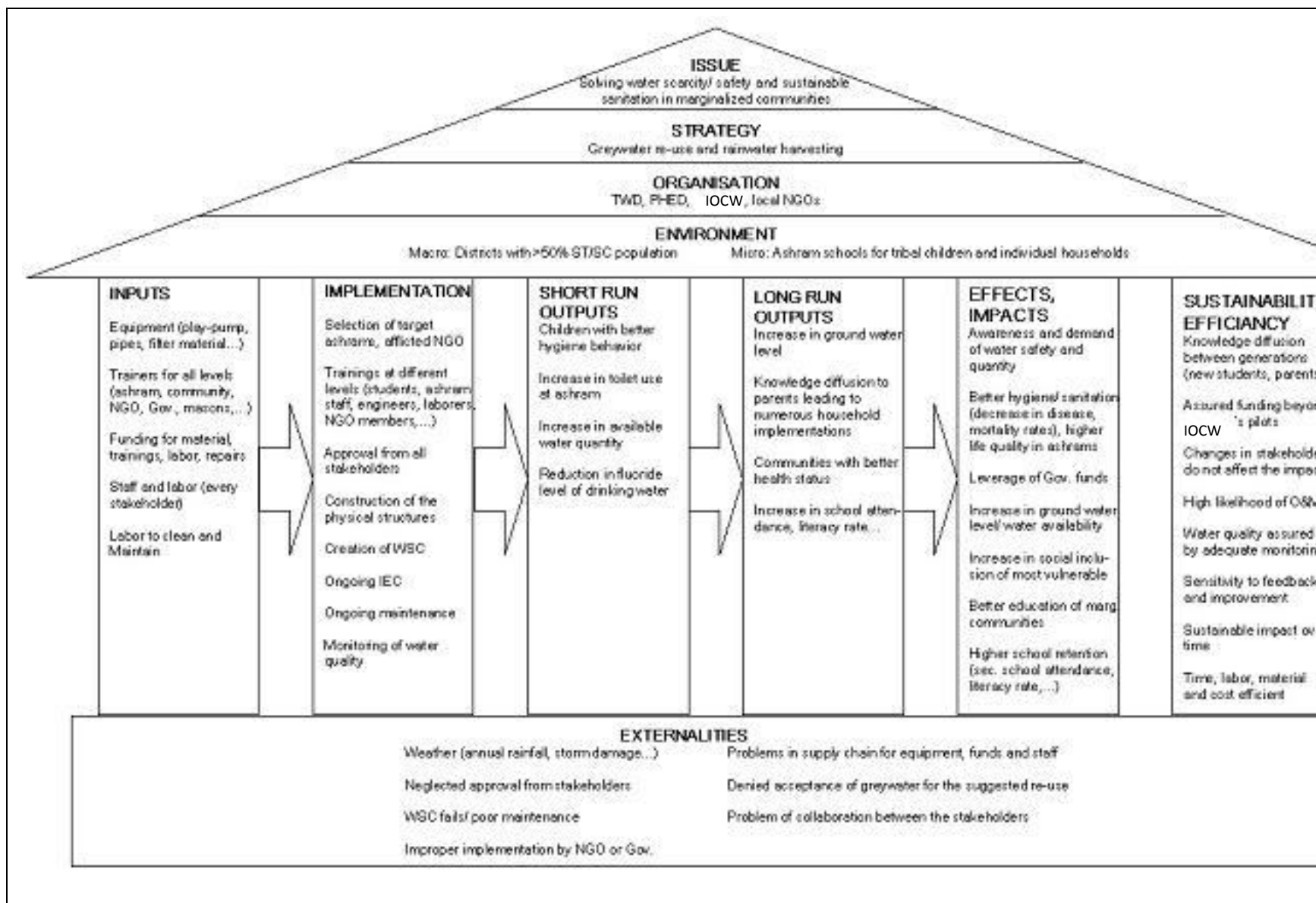


Figure 4: Intended Impact model of IOCW's IWM program

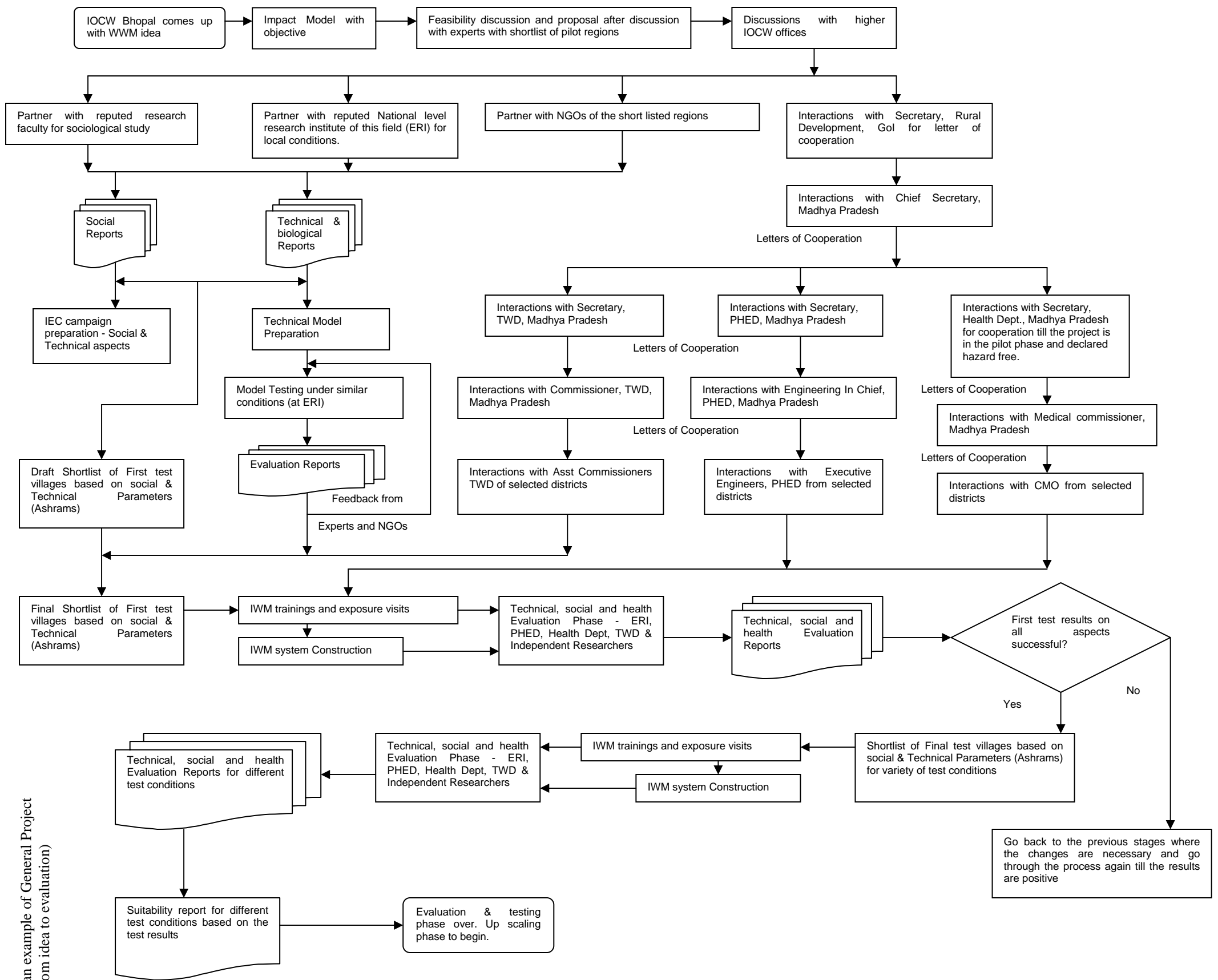


Figure 5: IWM as an example of General Project implementation (from idea to evaluation)

Figure 6: Timeline of IWM project

