

Title of Project

IMPROVING WATER SECURITY AND SANITATION AMONGST MARGINALIZED COMMUNITIES IN SELECTED DISTRICTS OF INDIA AND NEPAL



Project Proposal

For submission to **Viva con Agua**

Duration 4 years: 04.2012 – 04.2016

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I. Project Holder

Welthungerhilfe is the official project holder. The overall coordination and monitoring will be done by Welthungerhilfe Regional Office in Delhi, India.

The implementation of the project will be being carried out by three partner organisations in India and Nepal:

- Ghoghardiha Prakhanda Swarajya Vikas Sangh (GPSVS) will be responsible for the project in the state of Bihar, India. The organisation was founded in 1978 and has considerable experience in the implementation of WATSAN work. GPSVS has been partner of Welthungerhilfe since 2007.
- Sampurna Gram Vikas Kendra (SGVK) will be responsible for the project in the state of Jharkhand, India. The organisation was founded in 1991 and has been working on WATSAN issues for many years. SGVK has been associated with Welthungerhilfe for six years.
- Rural Reconstruction Nepal (RRN) will be responsible for the project in the district of Chitawan, Ramechhap and Sankhuwasabha, Nepal. RRN was founded in 1989 and has been working in WATSAN issues for many years. RRN has been a partner of Welthungerhilfe since 2005.

2. Justification for the project and framework conditions

Presently home to almost a quarter of the world's population, South Asia faces a turbulent water future. Though well endowed with water resources, the region witnesses major water related crises, which are expected to worsen with climate change. Poor environmental management, poverty – over one-third of the population lives on less than US\$1 a day- and corruption compound the challenges of inadequate supplies of potable water and lack of sanitation. Water quality is degraded by high levels of agricultural, industrial and domestic pollution, exacerbated by unplanned urbanization.

In India and Nepal – two of the countries where the project is proposed, the situation on water and sanitation presents a challenging picture.

2.1 India

Despite huge financial resources allocated for the rural drinking water sector in India, it looks unlikely that India will reach the MDG targets for rural water and sanitation. According to World Health Organization and UNICEF reports, out of the 1.2 billion people around the world who are forced to defecate in the open, half live in India. So called high economic growth rates too have hardly translated into better water and sanitation conditions for the vast majority of Indians. The Household Amenities Census conducted in 2011 found that nearly half of India

defecates in the open but at the same time more than 63 per cent have access to either a landline or a mobile phone. Even more interestingly, while 47.2 per cent of Indians have a television set at home, only 58 per cent households have bathing facility within the premises. Access to drinking water within the premises, however showed an increase to 47% as against 39% in 2001.

The lack of adequate sanitation and safe water has significant negative health impacts. The World Bank estimates that 21% of communicable diseases in India are water related. Of these diseases, diarrhea alone killed an estimated 700,000 Indians in 1999 – over 1,600 deaths each day. The highest mortality from diarrhea is in children under the age of five.

The economic costs of inadequate water and sanitation too can hardly be underestimated. According to a World Bank report published in 2010, the economic costs of inadequate sanitation have been calculated at USD 53.8 billion, equivalent to 6.4% of India's GDP in 2006. The report indicates that premature mortality and other health-related impacts of inadequate sanitation, were the most costly at US\$38.5 billion (Rs.1.75

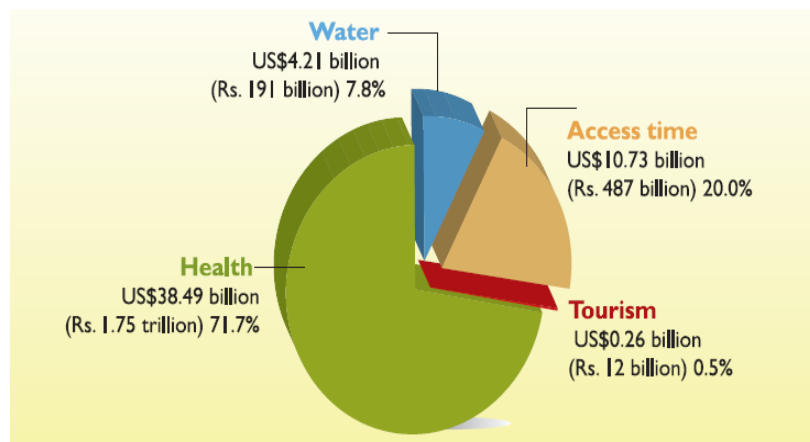


Fig:1 Composition of economic impacts of inadequate sanitation in India, 2006

Source: World Bank

trillion, 71.6 percent of total impacts), followed by productive time lost to access sanitation facilities or sites for defecation at US\$10.7 billion (Rs. 487 billion, 20 percent), and drinking water-related impacts at US\$4.2 billion (Rs. 191 billion, 7.8 percent).

In the state of **Bihar**, the coverage of water supply and sanitation in Bihar is very low with just 25 per cent of rural households having some sanitation facilities. The Total Sanitation Programme of the Government has not addressed the needs of the poor and vulnerable adequately, and facilities in schools, health centers and child care centers (*anganwadis*) are very poor. On the water front, the picture is even worse, with just 4.2 per cent of households having piped water connections against the national average of 42 per cent. About 42 per cent of the population is not covered with safe water supply and 22 of 38 districts in the state have quality problems caused by arsenic or fluoride contamination. The number of faulty handpumps outstrips the number of replacements every year.

The new state of **Jharkhand** in Eastern India which was carved out of Bihar in 2000 is still trying to cope with basic issues of water and sanitation. As per the latest census report, the state

of Jharkhand which is also a predominantly tribal belt, 92.4% households in the rural areas have no toilet facility and sanitation. Even today in Jharkhand, 31.9% of women still continue to walk more than half km to fetch water drinking water. In terms of availability of water as per census 2011 in Jharkhand for 47.3% handpump/tube well are the main source for drinking water.

In India the proposed project seeks to build on and supplement the Integrated Water Resources Management (IWRM) programme currently co-financed by VCA. It seeks to address water management problems at the local level, while strategically influencing policies at a higher level. Strong institutional mechanisms, community ownership and management, maintenance, repair, clearing encroachments, management of resources, equitable distribution of water resources and enhanced access to entitlements from Government schemes will be core features of the project.

2.2 Nepal

Nepal's twelve year civil war as led to a breakdown of local government and social support structures. During the post-conflict phase the Government and many donor agencies invested a lot of physical and financial resources to improve the sanitation status of Nepalese people without any significant improvement. The situation can be characterized today by the following main issues: low coverage of sanitation facilities, poor hygienic practices, coverage gaps between sanitation and water supply in rural areas, poor knowledge and practices.

According to WaterAid Nepal, only 31 % of the population has proper sanitation, and around 3.5 million people have no access to safe water. Moreover, the majority of people in Nepal have a low understanding of linkages between poor hygiene and diseases. Approximately a third of all deaths in Nepal are of children under five, and half of these are due to diarrhea. Dysentery, skin diseases and acute respiration infection (ARI) are widely spread. Water supplies are often microbiological polluted and in some areas naturally occurring arsenic causes a contamination problem.

Nepal's National Sanitation Policy and Guidelines for Planning and Implementation of Sanitation Programmes were formulated in 1994. The policy recognizes sanitation as both a basic need and a basic right. It emphasizes community-centered approaches and the collaboration between government agencies and NGOs, donors and the private sector. The Rural Water Supply and Sanitation Policy and accompanying Strategy (2004) provide guidance on water and sanitation service provision in rural areas using community led participatory approaches. The policy introduces, amongst other things, minimum expenditure commitments for sanitation and hygiene promotion. It has further set a national goal to provide basic water supply and sanitation facilities to all Nepalese by 2017.

The National Water Plan 2005 included a commitment to provide basic sanitation facilities to 70% of the population by 2010, and to 90% by the end of 2012. More recently, a Master Plan for Sanitation and Hygiene in Nepal, 2009-2017, has been drafted. It is driven by a local bodies-led approach to achieve accelerated and sustainable universal coverage. However, the practical approaches and implementation strategies have not been very efficient so far. Of the 3,915 Village Development Committees (VDCs), which govern the country at the grass roots, only 300 have been declared as open-defecation-free (ODF) zones. Lack of political commitment, the

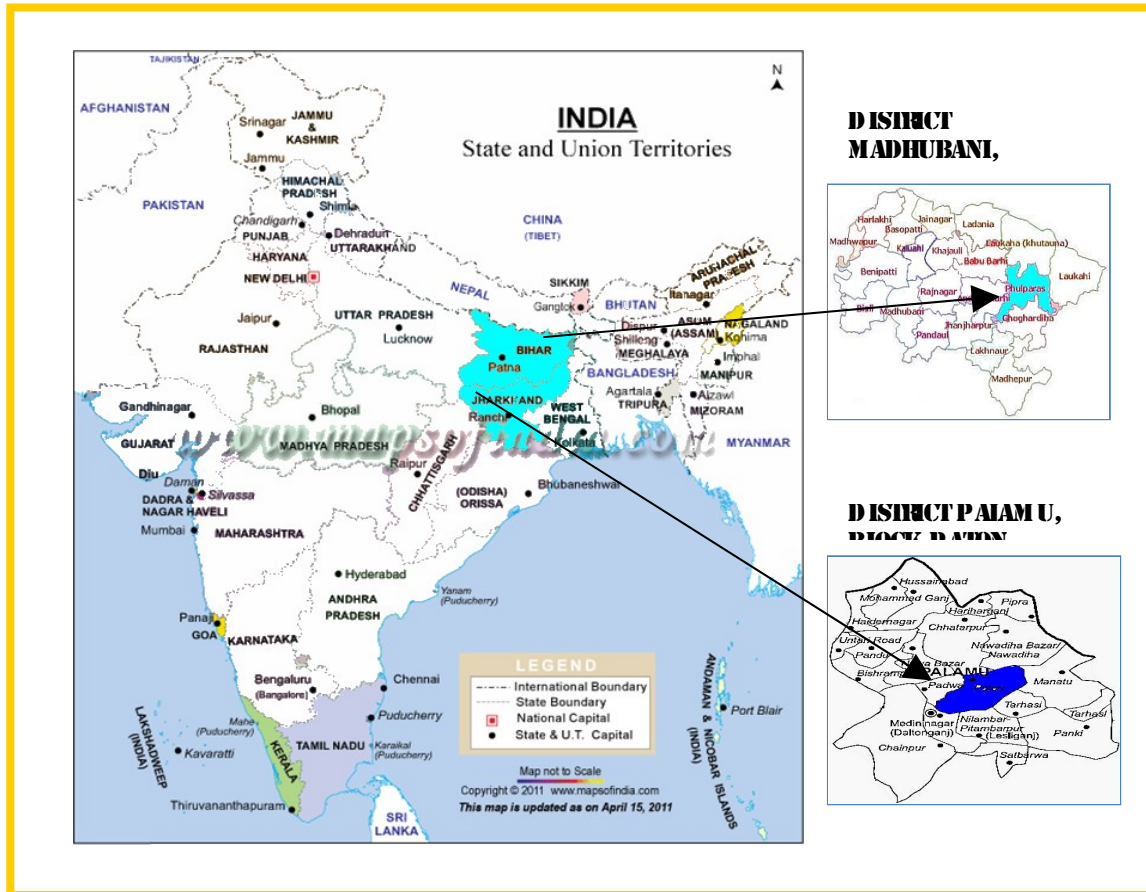
focus on predominantly technical approaches, rather than health and hygiene education, lack of specific guidelines and indicators, lax monitoring and follow-up by the government authorities and concerned Non-governmental Organizations has raised a serious question about sustainability of the ODF-Campaigns and their effectiveness to achieve the sanitation targets.

In Nepal the Project is designed under the Fight Hunger First Initiative Nepal which is currently implemented in seven VDCs of central and eastern Nepal. The initiative promotes a rights-based approach and follows the concept of „integrated rural development“. It supports the formation of civil society structures at community and district level such as “people’s forums”, school committees or Children Power Centers. Poor, vulnerable and socially excluded communities will be encouraged to demand rights and entitlements, access and control of local resources, secured supply of national services and increased decision-making power. The initiative assists them in developing their advocacy skills and knowledge to effectively influence the policy makers and to demand the proper implementation of rules and regulations.

The proposed project will complement the Fight Hunger First Initiative in Nepal and integrate/mainstream hygiene, water and sanitation as a cross-cutting issue into the existing interventions. It will help to achieve the targets with regard to nutrition, health of children and mothers and contribute to the MDG: “Reduce by half the proportion of people without sustainable access to safe drinking water and basic sanitation”. At first, the project will be implemented in three communities. In the second phase a scaling up of the approach is intended in the other four communities of the Initiative. A close link to the Fight Hunger First Initiative India will encourage a deepening of the rights-based approach to project work through partnerships, exchange and trans-regional cooperation.

3. Description of the Project region (exact location of project area / coordinates google maps)

3.1. India - In India the areas proposed for this project are located in the states of North Jharkhand, affected by recurrent droughts and in North Bihar which is severely affected by floods.



3.1.1 North Bihar

In the state of Bihar, the proposed project will be implemented in Phulparas Block of Madhubani District (See Annex 3 Project Location). Major problems of this area are:

Korak Village Development Committee (VDC) with an elevation range from 425 -1043 amsl (the altitude of Churia hills ranges from 600 to 2000 m) is situated in the Churia hills of the Chitwan district in southeastern Nepal. Korak has a total area of 4.669 ha with altogether 1590 households. More than 20% of the area is agricultural land; the remaining consists of forest with tropical hardwoods and a rich biodiversity. The majority of the population are the Tamang ethnic minority and Chepang - one indigenous community of Nepal. Most of household do not produce enough food for their own consumption and suffer food deficit for more than five months per year. In Korak, 46% of the Children are severely malnourished. The prevailing hygiene and sanitation situation of the Korak VDC is deplorable and results in diseases and other problems. Only 21% of the households have toilets and 31% of the households have drinking water facility. There are two sub-health posts in the VDC and the average distance to the health posts is 7 KM. The literacy rate of Korak is 46%. The Chitwan District was declared free of open defecation by the Government in September 2011. Korak is part of the Millennium Villages Campaign of Welthungerhilfe.

Siddhakali VDC is situated in the mountain range of Sankhuwasabha district in eastern Nepal. There are altogether 1008 households in the VDC. Total area of the VDC is 2795 Ha. In the VDC 45.3% of land is cultivable, and only 18% of cultivable land is irrigated. The remaining 42.5% of land is forest. Out of the total population 71% are ethnic minorities (Rai, Limbu, Tamang, Sherpa, Magar, Gurung, and Newar) and dalit and 71% of total households have food sufficiency for 3-9 months from their own production. In the VDC less than 40 % of the households have toilets and less than 50 % of the households have drinking water facility. There is one sub-health post and the average distance to the sub-health post is 10 KM. The literacy rate of the VDC is 53.5%.

Gelu VDC lies in Ramechhap district in the eastern mountain range of Nepal. There are altogether 1358 households in the VDC. Total area of the VDC is 2446 Ha. In the VDC 32.5% of total land is cultivable, and only 18.5% of cultivable land is irrigated. The remaining 34.5% of land is forest. Out of the total population, 77% are ethnic minorities ((Tamang, Newar, Magar, Bhujel, Kusunda and Majhi) and dalit and 77% of the households have food sufficiency for 3-9 months from their own production. In this VDC less than 40 % of the households have toilets and less than 50 % of the households have drinking water facility. The literacy rate of the VDC is 36 %.

The following main barriers to achieve total sanitation were pointed out by different stakeholders of the target communities:

- Lack of awareness of hygiene and sanitation awareness at community level
- Less priority to sanitation issues compared to others development activities such as road construction, school construction or electricity line extension
- Expensive and not locally adapted latrine models
- Lack of awareness of the communities to recognize women's specific sanitation related needs
- Lack of accessibility, especially for children, due to distant positioning

3.1.3 Problems common to both selected areas in India-

a) Social inequity, migration – In both the selected areas rural society is deeply divided along caste and class lines and dominated by a history of feudalism and violent caste conflicts, where water has been used as an instrument for social suppression and show of power. Women, particularly from amongst economically weaker Scheduled Castes (SCs) and Scheduled Tribes (STs), suffer the most due to discriminatory access to drinking water. Frequent droughts and floods lead to distress migration of people to adjoining areas and outside the state, forcing them to work at low remuneration and in slum like conditions.

b) Inaccessibility of Government programmes to the rural poor –Government programmes like Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Total Sanitation Campaign (TSC) and Public Distribution System (PDS) in selected areas have failed to reach the poor due to corruption, inadequate convergence, failure to address behaviour change aspects of WATSAN and weak Panchayati Raj system.

3.2 Nepal- The project will be implemented in three VDCs of three districts of Nepal namely Korak VDC of Chitawan, Siddhakali VDC of Sankhuwasabha and Gelu VDC of Ramechhap.



a) Recurrent floods, agricultural loss and food insecurity- About 56.5% of the flood affected people in the country belong to Bihar and about 76% population lives in North Bihar. Madhubani is one of the 18 Bihar districts which are repeatedly devastated by floods, resulting in land siltation, inundation, loss of infrastructure, household assets, livelihoods (livestock, crops) and other productive assets. With floods frequently destroying the rainy season (*kharif*) crop, food stock, fodder stock and the cattle shelters and the winter crop depending solely on erratic and inadequate rainfall, food security is a major problem.

b) Lack of sanitation- 90% of people in the target area go out in the open for defecation. During floods, this problem is compounded and is particularly distressing for females, children, disabled and the elderly.

c) Water logging and inaccessibility to safe drinking water – The area suffers from water logging in the rainy season, inadequate potable water sources aggravated by neglect and disappearance of traditional water reservoirs and dug wells, low water quality and high incidence of water borne diseases resulting from people drinking river water without boiling during floods. Presence of iron -and increasingly arsenic in water resulting from a switch to tapping groundwater for drinking- adds to the crisis in safe drinking water availability.

3.1.2 North Jharkhand-

In the state of Jharkhand, the project will be implemented in Paton Block of Palamu District. Major problems of the target area are:

a) Droughts and water scarcity- The selected district of **Palamu** falls in the rainshadow area and is affected by drought almost every third year, is characterized by dry loose sandy soil which does not retain moisture; scanty, skewed and erratic rainfall, with high intensity for a short duration resulting in high runoff. Traditionally, the farmers conserved water by constructing embankments across the land slope and diverting the water using channels called *pynes*. This low cost **Ahar Pyne** system has been **disintegrating** over the years due to neglect by the Government, lack of collective maintenance, encroachments, increasing dependence on tubewells and lack of convergence between old systems and new diversion schemes.

b) Agricultural loss and food insecurity- Agriculture, the major livelihood, is rainfed and characterized by complete dependency on the vagaries of the monsoon, continuously declining agricultural production and recurrent famine. Decline in traditional alternate livelihood sources (animal husbandry, Minor Forest Products (MFPs), cottage industry) compounds the problem.

c) Lack of sanitation - Lack of water as well as awareness leads to open defecation in 95% of the households in the project area.

- Lack of commitment from political parties
- Centralized approach and lack of coordination among different development organizations
- Varying subsidy policies and designs of service providers and supporting organizations
- Discriminations and inequalities amongst castes, gender and economic classes. Most of the water sources in the villages are utilized by the elite and used as instrument for social dominance and power.

4. Target Group (How many people will profit from the project?)

Target groups are as follows:

4.1 North Bihar, India- The project will target 68 villages (14 Panchayats) with a population of approximately 130,000 people. About 10% of this population belongs to the weakest sections of society- Scheduled (lowest) castes. Focus will be on 2300 households in 10 villages (3 Panchayats) belonging to marginalized sections.

4.2 North Jharkhand, India- The project will target 189 villages (22 Panchayats) with a population of approximately 108,000 people. About 32% of this population belongs to the weakest sections of society- Scheduled (lowest) castes and Scheduled Tribals. Focus will be on 2262 households in 20 villages (3 Panchayats) and a population of 16,000.

4.3 Nepal -In Nepal, the project will target the total population of Korak, Siddhakali and Gelu VDCs of Chitawan, Sankhuwasabha and Ramechhap districts with 3956 households. Through its cluster approach, the project will especially focus on 1,100 marginalized households because they are the most vulnerable.

5. Project Aim (What impact is to be achieved?)

The **overall goal** of the proposed project is to contribute to improved water security and community health (MDGs 1 and 7) in selected states of India and Nepal and to complement Government policies and programmes.

The project purposes are 1) Water, sanitation and hygiene practices of the community in selected areas of Nepal and India are improved 2) Processes and mechanisms for community management of water related resources are institutionalized and access to entitlements is increased.

Indicators- At the end of the project period, it is expected that:

- Water borne diseases are reduced by 30% at the village level
- 60% people in target villages are aware of their rights and Government entitlements, especially those related to water.
- Implementation of the water related Government programmes/schemes is enhanced by 30 % in the selected Panchayats in India

6. Project Description

The project has four result areas. Activities corresponding to each result area are given below

6.1 Result 1-Community-based institutions for water management are formed and strengthened

The project will initiate and support a continuous multistage planning and participation process, which concentrates on sanitized communities through self-help. It will involve the entire community, local government institutions and different stakeholders. It will also focus on local culture, context, material, creativity and innovation and encourage the communities to come up with their own ideas and actions.

Indicators: The project progress on this result would be measured by the following indicators:

- WASH Committees have prepared their Community Water Management Plans and submitted for approval at Gram Panchayats (India)
- Number of times water related issues are raised at VDC/GP/ Block/ District level forums increases by at least 80%
- At 90% of water related issues at village/ Gram Panchayat/VDC level, equity concerns are effectively voiced by People's Forums/WASH Committees

The following **activities** are proposed to achieve this result:

6.1.1 Baseline Survey and Situation Analysis- A baseline survey will be conducted on WASH and will include aspects as drinking water availability, safety and quality, hygiene and sanitation practices, incidence of water borne sickness and provision of Government services on WASH. The methods used will be a mix of Participatory Rural Appraisal (PRA) and household questionnaires.

A team comprising representatives of the people's forums, community workers and the project staff will study and analyze the sanitation status of the communities. They will use different **PRA tools** to develop the Sanitation Action Plans and trigger community members towards ending their open defecation behavior. **Transect walks** with the community people will help to understand different social and environmental impacts on sanitation. The team will organize with the community people **open defecation sites visits** and explain different effects of environmental pollution through human excreta and fecal oral transmission. To create motivation towards total sanitation the total amount of feces produced by the community will be calculated. **Social / community maps** will diagnose numbers of households, tap stands, wells, latrines and places of open defecation and help to identify the most needed areas. **Seasonal calendars** will analyze the availability of water and facilitate the planning of awareness programs, trainings, campaigns and hardware activities. **Problem trees and cause/effect analyses** will show the linkages between poor sanitation and diseases like diarrhea, dysentery and typhoid. A discourse will be initiated on the relationship between poor sanitation, poverty and social exclusion. **Stakeholder Analyses / venn diagrams** will help to identify the key people and institutions for advocacy, campaigns and partnerships. These tools will also analyze the status of decision-making within the community.

6.1.2 Formation of CBOs and handholding support- As mentioned in Section 3.1.3, most target areas have a history of feudal conflicts around water issues. Without democracy and gender equity in water management, there can be no real democracy. In order to break the shackles of social oppression that still exist in the target areas, individuals will be empowered through capacity building and Community Based Organizations will be organized and strengthened for voicing the concerns of the marginalized sections in access to and equitable control over water resources. Regular short training programmes will be conducted for members of these organizations on leadership and management of CBOs. Women would be ensured equitable representation in these institutions. The following types of institutions are envisaged:

Nepal

- **People's Forums- In Nepal,** RRN/Welthungerhilfe has established so called **"People's Forums"** in the target communities. These Forums consists of community representatives of the various self-help groups (groups of farmers, forest user groups), representatives of local authorities and political parties, women, youth and children's representatives, opinion leaders such as school principals or former elected officials. They identify entry points for the implementation of various development goals and will provide long-term support for planning and development in the communities. The Forums are organized across ethnicity and caste and consider the needs and demands of the different sections of the population, as well as advocacy groups. The project will facilitate discussions with the members on environmental sanitation, low cost/affordable toilet technologies, stakeholder identification, utilization of local resources, engagement with local government institutions. It will assist them in developing community action plans, integrating WASH into the overall Village Development Plan and organizing advocacy campaigns. The People's Forums will play a crucial role in mobilization, monitoring, demonstration and public audit of the intervention.
- **WASH Action Committees at Cluster Level-** People's forums and community groups will form small **WASH Action Committees** to address the cluster level issues and implement/coordinate the sanitation action plans at community level. These committees will be first established for the poorest and most vulnerable groups living in difficult areas. The action groups will include 7-11 representatives of the cluster households. They will receive different trainings related to hygiene, water and sanitation and they will explore with the communities resources and technologies for toilet installation, water management and improved water access. The WASH Action Committees will be linked with the Federation of Drinking Water and Sanitation Users Nepal (FEDWASUN) to initiate advocacy, networking and collaboration.
- **Women WASH Action Committees-** Will be formed at cluster level to support the People's Forums and the Open Defecation Free Campaigns. These committees will especially play a vital role to improve the sanitation status at household level. During house-to-house visits the members will sensitize the cluster families and promote better hygienic practices, including treatment and safe storage of drinking water and hand washing with soap.
- **Teachers and School Management Committees -** Training on sanitation and personal hygiene will be organized for primary level and lower secondary level for teachers and members of school management committees. Teachers and parents will train the schoolchildren ("one advice per day") and organize awareness camps, competitions and hygiene education programs.
- **Child Health Clubs** -In all secondary and lower secondary schools, Child Health Clubs will be formed. Through these clubs students will be made aware of hygiene and sanitation issues and be empowered to participate in decisions that concern WASH services. Children have a critical role and are key players in promoting sanitation and hygiene practices within their communities. It is assumed that they will become the local sanitary ambassadors working on awareness raising, organizing village campaigns, collecting baseline information, identifying defecation zones, monitoring and influencing friends and parents to change their hygiene behavior.

- **Youth Clubs-** The project facilitators will work with different Youth Clubs and mobilize them for the different sanitation activities. Youths are significant development activists and they will coordinate with schools and other community based institutions for conducting campaigns and supporting poor families with no financial and physical resources to construct toilets.

India

- In India The project foresees the formation of village **Water, Sanitation and Hygiene (WASH) Committees** based on local context and requirements, which will be involved in planning, execution and monitoring of project activities. The committees will be formed representing all village households as members of the general body. It will have an executive committee comprising of 15 members representatives from amongst all sections of the community in the village. Other village level Government functionaries (as elected WARD members, ICDS workers and ASHA workers) will also be invited to be part of this committee. Efforts will be made to corodinate with official Village Water Supply and Sanitation Committee as well as the Village Health & Sanitation Committees formed by the Government.
- **Child Health Clubs** will be formed comprising of students and will perform the same functions as in Nepal.

6.1.3 Micro planning at village level- After the formation of CBOs, micro planning will be the next step for taking forward the process of strengthening these village based institutions. Community Water Resources Management Plans in all the three project areas will be prepared at village/ VDC/ Gram Panchayat levels with the objective of identifying, conserving and rationally using water resources. These will be based on water budgeting, which will reflect the position of demand and availability of water in the area. CWRMPs will use PRA tools for planning water resources and make the process participatory and transparent, thus empowering the usually powerless and bring about equity in access to water resources. These will then be presented to local Government authorities for incorporation in Government schemes and plans. It is expected to mobilize funds from Government programmes like MGNREGS (India) for creation of durable community assets for water conservation and scaling up the models demonstrated in the project.

6.1.4- Training and support on institution building - The village level CBOs formed will be given continuous handholding support, training and exposures. They will be provided knowledge sharing, skill transformation trainings, orientation and counseling. This will include support on areas as booking keeping, community monitoring and effective Operations and Maintenance (O&M) methods.

6.1.5 Training on Rights Based Approaches- The programme will adopt a people centered rights based approach to improve transparency, accountability and responsiveness in the WASH sector. With the objective of empowering the CBOs to get access to Government entitlements and programmes on WASH, they will be given training in the use of tools as Right to Information, social audits (India) and community score cards. In India comprehensive training on RTI will be given to CBOs to enable them to fully understand their entitlements, the law and how to make requests for information. The Right to Education Act will be used to ensure WASH in schools and WASH will be integrated in the rural employment guarantee scheme (MGNREGS). It is expected that the learning and empowerment that communities gain will lead to enhanced abilities to claim their rights in other sectors as health, education, work, food security and other basic rights.

6.2 Result 2- Access to safe and potable drinking water is improved

To ensure community access to sufficient and safe drinking water, the project aims at a) demonstrating increased availability of safe drinking water through Government programmes and rainwater harvesting and b) demonstrating water testing and purification at household level.

Indicators: The project progress on this result would be measured by the following indicators:

- Access to safe drinking water for target beneficiaries improved by 30% from the base line
- All the water sources in target villages are tested for water quality parameters and data is available in the records

The following **activities** will be taken up to achieve this result:

6.2.1 Advocacy for access to safe drinking water

Being at the bottom of the caste system, public taps and drinking water sources are very often off limits for the ethnic minorities. The project will therefore facilitate the establishment of a framework in the different communities, which clearly defines rights and obligations, and promotes pro-poor and non-discriminatory service provision. In different workshops and meetings at VDC and community level facilitators will explain that the right to sufficient and clean water is a right for everybody and that the communities must ensure access to water to all. They will also emphasize that non-discrimination also includes special support and measures to ensure that the particular needs of vulnerable and marginalized groups are met.

The project will also train WASH Action Committees members, community workers and volunteers, health personnel, school staff and parents to **increase their awareness on safe water practices**. To lay the groundwork for further scale-up, these trainings will be conducted in cooperation with the district Water Supply and Sanitation Sub-Divisional Offices (WSSSDO (Nepal). This information will be reinforced through community programs (street dramas, public demonstrations, etc.) and media campaigns. At the same time, the project will increase access to and improve the **affordability and quality of household water treatment products** and create demand for these products. Different water treatment methods will be tested at the beginning of the project in selected households and schools and the product

availability of following for water treatment options will be analyzed: sodium hypochlorite solution, improved boiling, solar disinfection (SODIS), and filters, especially colloidal silver (CS) filters. The project will collaborate at District level with various producers to improve supply and create demand.

6.2.2 Campaigns for harvesting rain water for drinking- The campaigns will explain concepts such as aquifers and underground water flows in simple language and will promote conservation of rainwater, groundwater recharge, in situ rainwater conservation and rainwater harvesting for domestic and drinking water use. Information, education and communication (IEC) methods incorporating local knowledge will be used including posters, wall paintings, folk media and street plays. Writing on village walls will be effectively utilized for information dissemination. Women, who have the major responsibility of providing water for the household, will be crucial to the project and will be the focus of the information and education campaign. Children are powerful change agents and will also be suitably addressed and organized into through the children's clubs.

6.2.3 Demonstration of temporary, semi permanent and permanent facilities for storing rain water at household level- In Bihar and Jharkhand the following low cost locally adaptable technologies will be introduced for harvesting rainwater for drinking:

- **Temporary structures** This comprises a simple durable plastic sheet, the four corners of which will be tied to four or six poles in the ground. Rain water collected will be stored in pots for drinking.
- **Semi permanent structures -Jal Kothi-** The *Jal Kothi* is an innovation based on the age old grain storage structure, popularly known as *kothi*. This has been innovated and developed as a water storage facility by the Megh Pyne Abhiyaan. It comprises a thinly meshed bamboo frame which is plastered with a thin layer of cement-sand plaster, which is applied from both outside and inside the frame, making it robust and water resistant. About 280 *Jal Kothis* will be provided to deserving beneficiaries in all three project areas for demonstration and sale by potters once the demand is generated.
- **Permanent rainwater storage tanks-** Roof top rain water will be harvested and thirty two storage tanks for storing rainwater will be constructed preferably at community locations like schools, *Panchayats* to ensure maximum visibility. Under this model, the water collected on the roofs of houses will be conveyed through a pipe either into a tank for water storage (to be used for domestic purposes) or into a soak pit for groundwater recharging. Technical input support will also be identified from suitable organizations. For construction of these models, local resources will be used. The conserved water will be used for domestic purposes. Through Government programmes, district & state government will be sensitized towards this model and efforts made to scale it up. These will be locally adapted and kept as low cost as feasible to ensure multiplier effect. Maintenance measures like cleaning and disinfection will be undertaken to ensure the quality of water stored in the tank.

6.2.4 Introduction of water treatment technologies- To overcome the problem of excessive iron and bacteriological contamination in drinking water in their project area, locally developed earthen **pitcher filters** called *matka* filters similar to steel water filters will be introduced in Bihar. About 150 such filters will be demonstrated and the potters will be trained as barefoot technicians, expected to sell these filters as demand rises. Different models will be compared before finalizing the filter.



6.2.5 Trainings on handpump repairing- Handpumps break down frequently either because of substandard drilling, washer or fulcrum failure. Getting an engineer from the local water supply department to fix it can take many days and visits. Hence training will be provided on handpump repair, especially to women, as barefoot technicians who will be equipped in repair & maintenance of these water sources and will receive payment for these services. They will collect a nominal charge from the households that use the handpump and payment for their travel when they take water samples to the laboratory for testing or have to replace a part. Besides providing prompt service to the community, this will empower the trained women and ensure sustainability of water resources for long term community use.

6.2.6 Water testing trainings and monitoring of Earthen pitcher (matka) filters water quality- Water quality is a significant problem, especially in the Terai Region of Nepal and in Bihar (India). With the objective of disseminating scientific knowledge to the people about the status of surface/ groundwater and its impact on the human body and building the capacity of the community, water testing training will be taken up. Trainings will be conducted for community members as well as field staff of NGO partners to test water scientifically in partnership with suitable resource organizations as the Development Alternatives (India) and ENPHO (Nepal). Low cost water testing kits called *Jal Tara* kits which can test 14 parameters including physical, chemical and biological parameters will be made available to these trained community members, who will provide the testing facility to the community. The results of water testing will be compiled into reports to be shared with Government authorities. After taking training at the village level, the community members will take up water quality testing at sources to point of use.

6.2.7 Small water supply schemes - In Nepal the project will support the development of small water supply schemes for ensuring community's access to sufficient water. In selected clusters without water facilities access to water will be improved by constructing and renovating small water supply systems (mainly gravity) for demonstration in close cooperation with the local authorities. The local communities will contribute in form of labor and the provision of construction material. Repair and maintenance funds will be established by monthly household collection and managed by the WASH Action Committees. **Point source protection and restoration** will be demonstrated to avoid water contamination by human intrusion, cattle grazing, surface drainage runoff and floods, landslide and erosion.



Unprotected point source



Community tap supported by RRN

6.3 **Result 3 Hygiene and sanitation practices of target group are improved**

This result will aim at addressing the problem of inadequate sanitation and hygiene through improved toilet facilities and hygiene practices as proper water handling, hand washing, personal hygiene etc.

Indicators- It is expected that at the end of four years the following changes can be seen:

- 50% of the target village population is aware about good hygiene practices
- Percentage of people in target villages using latrines goes up by 20%.
- 50% of school children in target villages have clear understanding of good hygiene practices

The following **activities** are proposed to address the problems of open defecation and lack of hygiene in the selected areas:

6.3.1 Awareness campaigns on WASH- Behavior change will be the major focus of health and sanitation promotion activities. Campaigns will be designed and conducted on water and sanitation issues with the objective of addressing attitudes towards water, toilets and personal hygiene. A combination of two methodologies- **Community-led Total Sanitation (CLTS)** and **Participatory Hygiene and Sanitation Transformation (PHAST)** will be used.

While CLTS will use a number of participatory steps in order to persuade people to construct, further develop and sustainably and hygienically use latrines, PHAST will work mainly with pictures and have different pre-defined sessions that will easily be done by trained community members, for instance on transmission ways of major water-borne diseases, the sanitation ladder etc. Behavior change communication and promotion of sanitation will be central to the campaign, with focus on women who will be both promoters and beneficiaries. Schools will be especially encouraged to unite in promoting safe water, environmental sanitation and personal hygiene. IEC techniques will be used as wall writing, posters, pamphlets, folk media etc. In India the project will also disseminate information about the provisions and norms of Government programmes as the Total Sanitation Campaign (TSC), Nirmal Gram Puruskar programme and mobilization of these programme by CBOs.

6.3.2 Trainings on CLTS and PHAST- Trainings will be conducted on CLTS and PHAST methods with all stakeholders as under:

6.3.2.1 Five day Training of Trainers (TOT) on Participatory Hygiene and sanitation Transformation (PHAST): PHAST is tool developed specifically to promote a transformation in continuous hygiene behavior change and to improve sanitation. It has been designed for water, sanitation and hygiene, as that sectors are at problem. It uses visual materials, which allow people to explore water supply and sanitation issues in a creative way. It utilizes methods and materials that stimulate the participation of men, women and children. Field staff will be trained on that tool and later on they will train the community.

6.3.2.2 Five day TOT on Community Lead Total Sanitation (CLTS): Field staff will be trained on CLTS by hiring experts from organizations working on WASH and exposure visits will be conducted to see best practices on WASH.

6.3.2.3 Sanitation awareness training to communities and Government functionaries - Training will be provided to the WASH Committee members, NGO staff, village level Government workers as the school teachers, health workers, Panchayati Raj functionaries and Female Community Health Volunteers (FCHV) to sensitize them on sanitation. Standards and indicators for a total clean and hygienic household will be developed with community participation. Every household which fulfills the set standards will receive a **“WASH-sticker”** from the WASH Action Committees. The sticker will be fixed, for everybody visible, on the awarded house.

6.3.2.4 Sanitation awareness trainings to students, teachers and school management committees- For primary level and lower secondary level training will be provided to teachers and school management committees. For secondary level the training will be provided to students. Teachers will record personal hygiene behavior of their students and identify “**the best WASH student of the month**”. The student’s individual cleanliness, discipline and his social engagement with regards to WASH will be considered and evaluated. Similarly, a student will be selected as “student of the year” and will be awarded in annual function of the school. This will encourage students to maintain their personal hygiene and become socially involved.

6.3.3 Trainings and exposure visits on Ecosan/ other sanitation measures, constructing pilots

The following sub activities will be conducted for promoting sanitation methods, particularly **Ecosan**:

- Conducting awareness camps on the concept of Ecosan/ other sanitation methods, their convergence with existing systems in India and benefits
- Conducting exposure visit for selected beneficiaries and opinion leaders from the villages.
- Establishing live demonstrations of viable and innovative models of Ecosan and its connection with sustainable agriculture
- Promoting dialogue and exchange of information and learning around this demonstration as well as around the knowledge acquired from other sources
- Linking up with suitable Agriculture Universities/ agencies working on this theme and carrying out trials on agricultural productivity
- Promoting entrepreneurs for setting up village marts on sanitation, that would sell all material related to sanitation as urinal pans, cement blocks etc. These entrepreneurs would receive technical trainings and exposure to good practices in sanitation.
- Networking for experience sharing and scaling up.

6.3.4 Technical support on low cost technologies- In Nepal, the project will assist the People’s forums and action committees to develop water and solid waste management technologies like compost bins or plastic collection points. In order to reduce the respiratory infections different workshops will be held on the feasibility of improved cooking stove, operational procedure and construction techniques.

6.4 Result 4 Capacities of Welthungerhilfe and partner staff in WASH and advocacy for community rights are improved

Awareness and training on WASH programmes will be organized for local Government functionaries, service providers & community leaders with the objective of mobilizing them and the community on public entitlements, transparency and accountability in governance. These trainings will prepare the ground for conducting the Social Audits and Public Hearings, which will be conducted by partner NGOs (in India) under the leadership of the CBOs.

Indicators: The progress on this result can be measured by the following indicators:

- In India, at the Block level, Government authorities have taken up 30% of the Community Water management Plans for implementation through different programmes.
- 50% of the target population is aware about water as a right and on their entitlements related to water.

6.4.1 Design and conduct trainings on Government entitlements for the project staff and community

In India, the project will liaison with Government authorities at various levels for mobilizing funds/ technical assistance from Government programmes/ agencies for achieving the objectives of the project. Some of these are as follows:

- Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).
- National Rural Water Supply Programme (NRWSP),
- National Rural Health Mission (NRHM) ,
- Public Health Engineering Department (PHED),
- Total Sanitation Campaign (TSC)
- Right To Information Act (RTI)
- Nirmal Gram Puraskar (NGP)

In Nepal, the project will conduct a series of meetings and workshops for the members of the different political parties and will include them in the different activities.

VDCs will be supported to elaborate a WASH Community Action Plan. At District level it will assist the District Water Supply and Sanitation Sub-Divisions and the District Public Health Offices to develop strategies, guidelines, standards and indicators for the implementation of the Open-Defecation-Free-Zone campaign.

6.4.2 Network with other NGOs/ Civil Society, especially on the Right to Water – In India and Nepal, the right to water is not enshrined as a fundamental right. Declarations by the United Nations, other international organisations and judicial pronouncements by the Supreme Court of India from time to time that right to water is part of right to life, have contributed to the growing awareness on this issue. With the objective of campaigning for this basic human right, alliances will be forged with networks/ NGOs. Workshops for Right to water and other important issues related to community water rights will be conducted, with Welthungerhilfe providing a leading role on this activity.

6.4.3 Organize stakeholder interface camps

In India, stakeholder interface workshops will be organized and common platforms provided to raise community concerns on water and to enable Government and Panchayat/VDC functionaries to understand WASH and people's rights. Community members will be mobilized for effectively utilizing Government grievance redressal platforms such as *Tehsil Diwas* and *Block Diwas*, encouraged to submit applications at this platform and track the applications till their redressal.

7. Measures (what is to be done?)

As exact as possible description of technical details (example: filter: yes/no? Does filtering function?)- Already described in 6 above.