"Springs of life"

Constructing Spring Boxes for Village Water Supplies

L'Église Evangélique Luthérienne de la République Centrafricaine

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Description of the practice:

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Constructing Spring Boxes for Village Water Supplies

Aim of the practice:

To provide an improved water supply to rural villages in a country with little infrastructure and funding.

Target group(s):

Rural village populations in remote areas of western Central African Republic.

Partners involved:

Evangelical Lutheran Church in America (ELCA) and the Evangelical Lutheran Church in the Central African Republic (EELRCA after its name in French)

Duration of practice:

Planning and working with the villagers takes a month or more. Construction can be completed in about a week. Spring Boxes last a number of years and can last decades. This is an on-going project which will continue as long as the need exists.

Financing (short/medium/long term):

Financing is provided by the Evangelical Lutheran Church in America-Global Mission (ELCA-GM) and the Evangelical Lutheran Church in America-World Hunger Fund (ELCA-WHF)

Brief outline of the practice:

The Evangelical Lutheran Church of the Central African Republic (CAR) works together with villagers in western CAR to identify water sources, construct spring boxes, chambers designed to make optimum use of a natural spring, and maintain them after they are constructed. The project, known as "Projet d'Aménagement des Sources d'Eau (PASE)", ensures that safe physical access to the water is guaranteed in the design and construction of the water points and connecting walkways. Careful consideration is also given to the safe use of the spring for other domestic purposes such as washing clothes.

A spring box is constructed by digging out the spring, building a concrete box to collect the spring water, and then running a pipe to a concrete pad for villagers to fill their buckets (filling station). Often steps are added to improve access and a concrete pad to wash clothes. Selection of the springs and construction is done with village participation.

Villagers then construct a simple fence made of local materials around the filling station in order to keep animals and livestock out of the area. PASE encourages villagers to form a committee to keep the spring box area clean and to make any minor repairs.

1. How does the practice meet the criterion of availability?

Explanatory note Availability:

Availability refers to sufficient quantities, reliability and the continuity of supply. Water must be continuously available in a sufficient quantity for meeting personal and domestic requirements of drinking and personal hygiene as well as further personal and domestic uses such as cooking and food preparation, dish and laundry washing and cleaning. Individual requirements for water consumption vary, for instance due to level of activity, personal and health conditions or climatic and geographic conditions. There must also exist sufficient number of sanitation facilities (with associated services) within, or in the immediate vicinity, of each household, health or educational institution, public institution and place, and the workplace. There must be a sufficient number of sanitation facilities to ensure that waiting times are not unreasonably long

Answer:

Spring boxes increase the availability of safe potable water by improving access and by cleaning up the area around the spring. After a spring box is constructed less water is lost into the mud hole that often surrounds an unimproved spring

2. How does the practice meet the criterion of accessibility?

Explanatory note: Accessibility

Sanitation and water facilities must be physically accessible for everyone within, or in the immediate vicinity, of each household, health or educational institution, public institution and the workplace. The distance to the water source has been found to have a strong impact on the quantity of water collected. The amount of water collected will vary depending on the terrain, the capacity of the person collecting the water (children, older people, and persons with disabilities may take longer), and other factors. There must be a sufficient number of sanitation and water facilities with associated services to ensure that collection and waiting times are not unreasonably long. Physical accessibility to sanitation facilities must be reliable at day and night, ideally within the home, including for people with special needs. The location of public sanitation and water facilities must ensure minimal risks to the physical security of users.

Answer:

PASE tries to improve accessibility. While we cannot decrease the distance that people must travel from their homes to the spring we do our best to increase accessibility with improvements to the path and sometimes the addition of concrete steps, which decreases the number of accidents and facilitates hauling water.

3. How does the practice meet the criterion of affordability?

Explanatory note: Affordability

Access to sanitation and water facilities and services must be accessible at a price that is affordable for all people. Paying for services, including construction, cleaning, emptying and maintenance of facilities, as well as treatment and disposal of faecal matter, must not limit people's capacity to acquire other basic goods and services, including food, housing, health and education guaranteed by other human rights. Accordingly, affordability can be estimated by considering the financial means that have to be reserved for the fulfilment of other basic needs and purposes and the means that are available to pay for water and sanitation services.

Charges for services can vary according to type of connection and household income as long as they are affordable. Only for those who are genuinely unable to pay for sanitation and water through their own means, the State is obliged to ensure the provision of services free of charge (e.g. through social tariffs or cross-subsidies). When water disconnections due to inability to pay are carried out, it must be ensured that individuals still have at least access to minimum essential levels of water. Likewise, when water-borne sanitation is used, water disconnections must not result in denying access to sanitation.

Answer:

The cost of constructing a spring box varies greatly depending on the site, the size of the spring, and the distance material must be transported. PASE estimates the "average" spring box costs about 1.000.000 francs CFA or roughly \$2000 in this area. Even this modest price far exceeds the amount of money available in rural villages in the Central African Republic. The villagers are genuinely unable to pay for water through their own means. Therefore the ELCA covers the cost, and construction is done with the assistance of the local population.

4. How does the practice meet the criterion of quality/safety?

Explanatory note: Quality/Safety

Sanitation facilities must be hygienically safe to use, which means that they must effectively prevent human, animal and insect contact with human excreta. They must also be technically safe and take into account the safety needs of peoples with disabilities, as well as of children. Sanitation facilities must further ensure access to safe water and soap for hand-washing. They must allow for anal and genital cleansing as well as menstrual hygiene, and provide mechanisms for the hygienic disposal of sanitary towels, tampons and other menstrual products. Regular maintenance and cleaning (such as emptying of pits or other places that collect human excreta) are essential for ensuring the sustainability of sanitation facilities and continued access. Manual emptying of pit latrines is considered to be unsafe and should be avoided.

Water must be of such a quality that it does not pose a threat to human health. Transmission of water-borne diseases via contaminated water must be avoided.

Answer:

A spring box is an improved water source. As such, the quality of the water is improved over the original spring water by decreasing the contact with sources of water-borne diseases, such as mud, dirt, and vegetable matter. Villagers also construct a simple fence out of local materials around the filling station to keep animals and livestock out of the area.

5. How does the practice meet the criterion of acceptability?

Explanatory note: Acceptability

Water and sanitation facilities and services must be culturally and socially acceptable. Depending on the culture, acceptability can often require privacy, as well as separate facilities for women and men in public places, and for girls and boys in schools. Facilities will need to accommodate common hygiene practices in specific cultures, such as for anal and genital cleansing. And women's toilets need to accommodate menstruation needs.

In regard to water, apart from safety, water should also be of an acceptable colour, odour and taste. These features indirectly link to water safety as they encourage the consumption from safe sources instead of sources that might provide water that is of a more acceptable taste or colour, but of unsafe quality.

Answer:

Spring boxes have been used in this area for many decades and are accepted by the local population. They improve the color, odor, and taste by decreasing the amount of mud in the water. The construction of a concrete washing pad adjacent to the spring is greatly appreciated and attracts people who might not otherwise come to the spring for water.

6. How does the practice ensure non-discrimination?

Explanatory note: Non-discrimination

Non-discrimination is central to human rights. Discrimination on prohibited grounds including race, colour, sex, age, language, religion, political or other opinion, national or social origin, property, birth, physical or mental disability, health status or any other civil, political, social or other status must be avoided, both in law and in practice.

In order to addresss existing discrimination, positive targeted measures may have to be adopted. In this regard, human rights require a focus on the most marginalized and vulnerable to exclusion and discrimination. Individuals and groups that have been identified as potentially vulnerable or marginalized include: women, children, inhabitants of (remote) rural and deprived urban areas as well as other people living in poverty, refugees and IDPs, minority groups, indigenous groups, nomadic and traveller communities, elderly people, persons living with disabilities, persons living with HIV/AIDS or affected by other health conditions, people living in water scarce-regions and sanitation workers amongst others.

Answer:

Because of the low population density in this area, springs and spring boxes are generally available to all the residents of the area. However, some villages have experienced problems due to a doubling or tripling of their populations due to the influx of IDPs caused by insecurity in the northern Central African Republic. PASE has worked hard in these areas to increase the number of spring boxes. In addition, we always insist that all the ethnic groups present in the village work together with us to construct the spring box.

7. How does the practice ensure active, free and meaningful participation?

Explanatory note: Participation

Processes related to planning, design, construction, maintenance and monitoring of sanitation and water services should be participatory. This requires a genuine opportunity to freely express demands and concerns and influence decisions. Also, it is crucial to include representatives of all concerned individuals, groups and communities in participatory processes.

To allow for participation in that sense, transparency and access to information is essential. To reach people and actually provide accessible information, multiple channels of information have to be used. Moreover, capacity development and training may be required – because only when existing legislation and policies are understood, can they be utilised, challenged or transformed.

Answer:

In selecting the sites to construct spring boxes, PASE seeks input from government officials, traditional chiefs, community and religious leaders, churches, mosques, and most importantly the women of the village.

During construction we insist on help from all ethnic groups that live in the vicinity of the spring.

8. How does the practice ensure accountability?

Explanatory note: Accountability

The realization of human rights requires responsive and accountable institutions, a clear designation of responsibilities and coordination between different entities involved. As for the participation of rights-holders, capacity development and training is essential for institutions. Furthermore, while the State has the primary obligation to guarantee human rights, the numerous other actors in the water and sanitation sector also should have accountability mechanisms. In addition to participation and access to information mentioned above, communities should be able to participate in monitoring and evaluation as part of ensuring accountability. In cases of violations – be it by States or non-State actors –, States have to provide accessible and effective judicial or other appropriate remedies at both national and international levels. Victims of violations should be entitled to adequate reparation, including restitution, compensation, satisfaction and/or guarantees of non-repetition. Human rights also serve as a valuable advocacy tool in using more informal accountability mechanisms, be it lobbying, advocacy, public campaigns and political mobilization, also by using the press and other media.

Answer:

All employees of PASE, with the exception of the technical advisor, are Central Africans. They receive regular training in order to develop the capacity of this project. An annual budget is prepared by PASE and is approved by both the ELCA and the EELRCA. The program is audited annually by both internal and external auditors. Copies of these audits are made available to anyone with an interest in the program.

9. What is the impact of the practice?

Explanatory note: Impact

Good practices – e.g. laws, policies, programmes, campaigns and/or subsidies - should demonstrate a positive and tangible impact. It is therefore relevant to examine the degree to which practices result in better enjoyment of human rights, empowerment of rights-holders and accountability of duty bearers. This criterion aims at capturing the impact of practices and the progress achieved in the fulfilment of human rights obligations related to sanitation and water.

Answer:

Spring boxes are an improved water source. Although few health statistics are available in the Central African Republic, it is felt that spring boxes decrease the incidences of water-borne diseases, thereby increasing health, a positive and tangible impact.

Anecdotal evidence suggests that PASE helped stop a local typhoid epidemic by building spring boxes and encouraging better hygiene among villagers.

10. Is the practice sustainable?

Explanatory note: Sustainability

The human rights obligations related to water and sanitation have to be met in a sustainable manner. This means good practices have to be economically, environmentally and socially sustainable. The achieved impact must be continuous and long-lasting. For instance, accessibility has to be ensured on a continuous basis by adequate maintenance of facilities. Likewise, financing has to be sustainable. In particular, when third parties such as NGOs or development agencies provide funding for initial investments, ongoing financing needs for operation and maintenance have to met for instance by communities or local governments. Furthermore, it is important to take into account the impact of interventions on the enjoyment of other human rights. Moreover, water quality and availability have to be ensured in a sustainable manner by avoiding water contamination and over-abstraction of water resources. Adaptability may be key to ensure that policies, legislation and implementation withstand the impacts of climate change and changing water availability.

Answer:

After their construction, spring boxes require little to no maintenance. There are several examples of spring boxes in this country that have lasted and been used for decades. In addition, PASE works with villagers to encourage them to keep the area around the springs clean and their livestock away from the filling station.

Final remarks, challenges, lessons learnt

Spring boxes have proven to be an effective improved water source for rural village populations in remote areas in an extremely poor country.