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COOPÉRATION

**RWANDA
ALLEMAGNE**

Evaluation Report on the Baseline and Intervention Study on School Health in Rwanda



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Abbreviations

CBM	Christoffel Blindenmission
ESP	Ecole de Santé Publique
FRESH	Focusing Resources on Effective School Health
FEA	Fond de l'Eau et Assainissement
IEC	Information Education Communication
HAMS	Hygiène et Assainissement en Milieu Scolaire
PSI	Population Service International
UNICEF	United Nations International Children Fund

1 Background and Goals

Promoting good health and hygiene and developing sanitation facilities and water supply in schools, is not only regarded as one of the most cost-effective of public health strategies, but by strengthening the capacity of the future generation, it is a further investment into a country's development.

In this context and with technical and financial assistance from the GTZ Sector Programme "Disease control and health promotion", the German Health Programme, Rwanda and the School of Public Health, Rwanda conducted a *baseline assessment and feasibility study on the initiative 'intersectoral cooperation for school health'* in the districts of Ngororero and Huye.

In four primary schools the intervention study aimed to:

- Improve the health status of the entire student body in the targeted primary schools through:
 - simple and large scale diagnosis and therapy,
 - provision of sanitation and water facilities,
 - and sensitization and skill-based behaviour change.
- Guarantee sustainability of the achieved improvement through training of teachers and pupils, parents.
- Contribute to and strengthen the existing programmes on school health, on regional and national level.
- Contribute to international goals, strategies and practical knowledge in the school health sector.

During a comprehensive baseline study, 1,978 students in 4 primary schools were examined, including rapid anamnesis and clinical check up, eye and stool examinations. In the four schools 2,800 children were treated with de-worming medication and in addition, where necessary, eye therapy was provided (financed by CBM).

In an attempt to establish a healthy school environment the water and sanitation facilities at the four schools were improved. Water reservoirs have been constructed and installed, in order to supply water to the Primary School of Sovu and at Kiziguro Primary School. Besides, at the Primary School of Kiziguro as well as at the Primary School of Kiruhura, ECOSAN¹ type latrines were constructed. Each target school additionally received 10 locally developed hand washing facilities (Canarie de Clapets)².

¹ ECOSAN ecological toilets, whereby faeces and urine is divided, and water is not necessary. After drying faeces with the help of ashes on a drying yard for a given time (approx 6 months), they can be used as fertilizers, thereby closing the cycle.

² Locally developed type of hand washing facilities. A jerry can which is fixed to a wall, with a small water pipe and flap to close and open it.

With the aim of achieving a sustainable maintenance of the new facilities and to establish a sense of ownership, all schools received sensitisation and training on utilisation and maintenance of the new facilities.

During the IEC Campaign that followed the baseline study, all children, all teachers and approximately 1,000 parents, received a one-day training and skill based sensitisation session on the topics identified during the study. One major sensitization topic included the water treatment with *Sûr'Eau*³ and parents and the school received samples of *Sûr'Eau*, in order to get acquainted to this method. In addition the target schools received teaching materials to facilitate their hygiene and health lessons in the future.

In order to assess the effectiveness and sustainability of the implemented measures an evaluation of the school health intervention study was conducted at all four schools.

2 Evaluation Methods

The methods used during the evaluation were intended to be kept simple, since the conducted intervention study served as a small component of the GTZ Santé Program in Rwanda. At all four schools a thorough observation and a structured interview with the school director were carried out.

3 Evaluation Results

3.1 Sovu Primary School

In general the school's director felt that the conducted interventions had a positive impact and improved the children's health status as well as the overall hygiene situation at the school. According to her the most effective intervention was the construction of a water tank and the distribution of de-worming tablets.

Since water is now present at school it has become easier to maintain the schools facilities and to establish a healthy behaviour. At the time of the visit the water tank was in a very good condition, filled up and used.

Another improvement was the installation of jerry cans for drinking water treated with *Sûr'Eau*, which are now available in all classrooms.

During the visit some of the latrines seemed to be cleaner than at the first inspection, according to the director this improvement is again due to the direct access to water. Yet except for the 5th and 6th class, all of the installed hand washing facilities were either broken or not filled with water.

Teachers as well as parents have expressed their content concerning the effectiveness of the de-worming medication, they felt that the health of the children improved and that children seemed to gain more weight, eat properly and be more attentive at school.

³ Water disinfection droplets

Following the sensitization sessions of the parents and the distribution of *Sûr'Eau*, some have given positive feedback to the teachers and expressed further interest in *Sûr'Eau* and respective sensitization measures.

After the sensitization campaign for the teachers and students, the school has made an effort to implement further activities to promote good hygiene and health. Girls and boys have been appointed different toilets, and two showers have been constructed. Boxes for sanitary material in the latrines and covers for the latrine holes have been installed. (Yet at the time of the visit most of these had either been removed, or broken, just very few were being used.)

Even though in general there seemed to be an improvement of the maintenance of latrines, the school is in need of new and appropriate latrines. The old ones are too dark, small and insufficient in numbers. Additionally, further sensitization on the maintenance of latrines is clearly needed, in particular for the smaller children.

The IEC material has only been partly read and used by the teachers of Sovu Primary School, mostly due to a lack of time and lack of motivation.

3.2 Kiruhura Primary School

According to the director of the Kiruhura Primary School there has been an overall improvement of the health status of children and the sanitary situation, which has mainly been due to the de-worming medication and the conducted sensitization measures. Teachers and parents have given feedback that children missed school less and seemed to be healthier.

The ECOSAN latrines which have been constructed are being used by the children starting from class 4 to 6. Each class has been appointed one stance for usage and maintenance. This measure seemed to be effective, since all the inspected stances were clean. There was no smell or insects and ashes necessary for the drying process were present, only sanitary material was missing. The drying yard behind the latrines is being used and seemed to be in good order.

However, the separate toilets for the teachers were not being used, teachers fear that children can see them using the latrine, since the urine flows into a separate compartment which is in the open. In addition, a latrine problem remains with the small children, since they have to continue using the old latrines, which are still under very bad sanitary conditions.

None of the installed hand washing facilities was filled and most were broken or had been removed. Yet as advised during the IEC campaign, the school bought 2 jerry cans in order to treat the drinking water for 1000 students with *Sûr'Eau*. There are also several boxes of *Sûr'Eau* remaining and some of the parents returned to receive more *Sûr'Eau* or/and further information.

Even though the school has access to a water tap they will have a problem with water availability in future, since they have to start paying for their water connection.

The distributed teachers guide books have been read by the teachers and are being used for STE lessons in the 3rd to 6th class, yet no real teaching program had been established.

3.3 Kirwa Primary School

According to the director of Kirwa Primary School the overall health status of children has mainly improved due to the medication of children with de-worming tablets. She received very positive feedback from parents on the effectiveness of the tablets. Further, parents expressed a great interest in the conducted sensitizations sessions.

Some of the latrines seemed cleaner than at the first inspection, most probably due to the new established maintenance rules, whereby each class has their own compartment and due to the sensitization conducted by PSI. However, the latrines for the 1st year students were under very bad condition during the visit, they clearly did not receive sufficient sensitisation.

The distributed IEC materials have only been used by 2 teachers during their STE lessons in classes 4 to 6; others didn't use it mostly because of lack of time. As a result to the sensitisation of teachers the school has included hygiene and health issues into several meetings.

Even though the school has two water tanks connected to a local source, there is a lack of water, probably due to insufficient pressure. The rainwater tanks by UNICEF have not been connected yet. Therefore none of the hand washing facilities is used, most of which were broken or had been removed already.

The school remains with several bottles of *Sûr'Eau*, nevertheless due to the lack of water *Sûr'Eau* is not being used to treat the drinking water for the children.

3.4 Kiziguro Primary School

For Kiziguro Primary School the major development was the construction of a rain water tank. The tank was fully filled with water during the time of the visit and hence classrooms and toilettes could be easily kept clean. The water tank further provided children with drinking water, which is treated with *Sûr'Eau*. Yet there is only one jerry can available for over 800 students! Even though water is available, hand washing facilities were not filled with water, and some were already broken. In order to wash their hands children have to ask the teachers for the key of the water tank tap, a procedure which is too complicated to be effective. (A lock was installed on the water tank tap in order to prevent villagers using all the water).

The ECOSAN latrines were not opened for usage yet, since the school has not been able to buy padlocks in order to lock the separate stances and control usage and maintenance. During the holidays some of the latrines had been forced open and used by the surrounding villagers.

The new IEC material has partly been used by some teachers during STE lessons and for separate hygiene lessons and most teachers stated they have been useful for their lessons.

4 Analysis and Summary of Results

According to the feedback from the directors of the target schools there has been a noticeable improvement in the overall health status of school children and the sanitary situation of the schools. All schools, including some parents, have given a very positive feedback on the de-worming medication and on the distribution of *Sûr'Eau*, which was used by all schools with access to water for treating the drinking

water for school children apart from Kiziguro. Yet most of the schools did not have sufficient funding to buy enough jerry cans as storage facilities for drinking water.

The two schools where water tanks were constructed stated that the maintenance of sanitary facilities and the provision of clean drinking water had become much easier.

Almost all of the installed hand washing facilities were broken, not filled with water or had been removed altogether.

Where water tanks had not been constructed, the schools complained about a lack of water and therefore a lack of possibilities for implementing appropriate maintenance and hygiene measures.

At the school where new ECOSAN latrines had been opened for usage, they proved to be a positive development even though some hesitation remained by the teachers. The other school where ECOSAN toilets had been constructed had not yet started to use them, lack of finances for padlocks being the major reason.

At all schools the old latrines seemed to be cleaner and better maintained since they introduced a rule whereby each class was made responsible for usage and maintenance of one toilet. Yet at all schools the toilets which were used by the smallest children were the dirtiest.

All schools gave a positive feedback on the conducted sensitization lessons, especially on those for parents. On the other hand, the IEC material distributed was not used by the majority of teachers, mostly due to a lack of time and necessary instruction of teachers.

Most of the schools had initiated new maintenance rules and made an effort to improve the sanitary and hygiene situation at schools according to their new knowledge and possibilities.

5 Conclusion

The experience gained through the conducted intervention study showed that even in resource poor settings, schools as learning environments and capacity building institutions, can contribute to the improvement of children's health situation if they are given the appropriate technical and financial assistance and if staff is provided with sufficient knowledge, material, and motivation. All target schools gave a positive feedback on the interventions that had been conducted and noted an improvement in either health status of children and/or the sanitary and hygiene situation at school.

The results of the evaluation demonstrated that the most effective of all implemented measures was giving access to water to the schools. In order for schools to be able to establish appropriate maintenance rules and practice hygienic and healthy behaviour, the provision of water proved to be a necessary prerequisite. Yet schools still do not have a regular and affordable access to water, and sustainable financial means for changing this situation are missing.

The evaluation also illustrated that in the future more robust and permanent solutions for hand washing facilities are to be preferred, since the installed Canaries des Clapets proved to be inappropriate for primary schools. In addition, the construction of latrines seemed to be an important measure.

The de-worming campaign proved to be another positive measure, and all schools expressed that they have noted a positive development of the children's health due

to the medication. Nevertheless all schools do not know yet how to finance such a measure in future.

Lack of funding remains a major constraint for all schools to practice hygienic and healthy behaviour, money for drinking water storage, padlocks or for the construction of new facilities is missing. The resources of Rwandan primary schools are limited, even small investments can only be done with great efforts and the majority of the schools will need financial assistance in order to improve their health/hygiene situation.

The results also demonstrated that the mere construction of school and sanitary facilities does not guarantee a better health status of school children. The sensitization measures were positively perceived, especially the inclusion of parents into sensitization. All schools made an effort to change their maintenance rules according to their new knowledge, teachers noted that children wash their hands more frequently and school facilities are better maintained.

The mere distribution and a short introduction into the IEC material proved to be insufficient. In order to be able to provide children with the necessary information, so they can take responsible actions, teachers need to be sufficient in number as well as the schools need to have a better access to necessary information, more technical assistance and motivation.

The dimension of external factors influencing the health status of school children has not been accounted for within this study, yet the sanitary situation at the children's homes is almost certainly similar, suggesting a common influence on the health of the children. Therefore the inclusion of parents and the surrounding communities play a major role and are necessary to guarantee maximum effectiveness of the implemented measures.

As a result of the implemented interventions, the health and hygiene situation at all targeted schools has improved and all schools noted a positive change. Yet in order to guarantee the sustainability of this development the schools need further financial and technical assistance. The establishment of a permanent monitoring system is necessary and teachers, students, and parents need to have access to regular information and sensitization measures.

6 Annexes

6.1 Recommendations for a Follow-up

Further interventions, monitoring activities and policy making are needed in order to guarantee the sustainability of the implemented project and in order to further improve the situation:

- 1) Assure **access to regular and affordable water** to the Primary School of **Kiruhura**, either by construction of a rainwater tank or by helping the school to keep the free water tap.
- 2) Construct appropriate **latrines** at the Primary School of **Sovu**.
- 3) Construct stable and **sustainable hand washing facilities** at the Primary Schools of **Sovu, Kirhura and Kiziguro**.
- 4) Assure safe **storage for drinking water** the Primary Schools of **Sovu, Kiruhura and Kiziguro**, through installing jerry cans and cups in classrooms for example.
- 5) Conduct **workshops for teachers at all schools** including the transfer of information on health and hygiene issues, training in teaching methods and usage of IEC materials. Since time seems to be a constraint, give ideas how to include these issues into the timetable without too much time effort. Like regular morning sessions, including health topics in all meetings, organising a Peer Educator system as suggested by HAMS etc.
- 6) Continue and intensify **education sessions at all schools for students** as well as **parents**.
- 7) Assist all schools in **money generating activities** (agriculture etc) in order for them to be able to take responsible actions such as: repeating de-worming campaigns, buying drinking water storage facilities, constructing new sanitary facilities and guarantying the maintenance of the new facilities and newly acquired behaviour etc.
- 8) **Monitor** the activities and development of the project through regular visits.
- 9) Even at Kirwa Primary School several problems remain which are not resolved such as the lack of water pressure, water storage facilities, latrines etc. Yet the school health project there is an initiative of UNICEF, who seems to be engaged regularly. Yet the question remains if one should get involved and **work together with UNICEF** at Kirwa(?)
- 10) Not only stress the **importance of including hygiene and health topics into the curriculum**, but also the importance for giving teachers the necessary **assistance and information** during the entrenchment meetings.

6.2 Recommendations for Further School Health Projects

The results of the conducted intervention demonstrated that even if children know about the importance of cleaning hands, without the regular access to water they do not have the possibility to change their behaviour. Hence in order to ensure the effectiveness and sustainability of school health interventions they need to be diverse.

Likewise the failure of our Canacles illustrated that one method might work well in one and badly in another environment, therefore interventions need to be adapted to the respective circumstances and continuously monitored.

The following recommendations can be regarded as a starting point in introducing school health interventions and as a basis for future expansion. (For further information see also FRESH Framework)

1) Provision of Safe Water and Sanitation

- Assurance of regular and affordable **access to water** and the availability of stable **hand washing facilities** can make a big change. Schools are able to maintain their sanitary facilities, and children can practice healthy behaviour.
- The availability of **water storage facilities** in order to be able to provide for safe drinking water is another important issue to focus on.
- **Sound construction policies** will help ensure that facilities address issues such as gender access, privacy and environmental factors.

2) Education, Information and Health Policies

- Organising **workshops for teachers** including the transfer of background information, raining of teaching methods and distribution of information and teaching materials, help teachers spread the right messages and design appropriate courses and take reasonable actions.
- **Special skill-based sensitisation** including the provision of IEC Material, not only for **students but also parents**, helps create sustainable behaviour change. Since the school is not the only factor determining children's health, the inclusion of parents and the surrounding communities play a major role.
- Assisting schools in establishing adapted **health policies and rules**, such as establishing Peer Education systems, help strengthen the education measures and guarantee further sustainability.

3) Delivering Health Services

- **Delivering health and nutritional services** at school such as annual health inspections or de-worming campaigns are cost-effective and easy measures that immensely improve children's health and their ability to study.