SCHOOL SANITATION AND HYGIENE IN VIET NAM

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CONTENTS

1. INTRODUCTION

1.1. General characteristics

Viet Nam consists of 61provinces and cities, 550 districts and 10,032 communes. It has the population of 75.5 million, one third of whom are below 15 years of age. Eighty per cent of the population live in rural areas, mostly working in agriculture.

There are 54 different nationalities in Viet Nam with the Viet (Kinh) as the largest group (87.2%). Vietnamese is the national language.

Viet Nam is a Socialist Republic. Since 1986, thanks to the "doi moi" (renovation), the socio-economic system in Viet Nam has experienced profound changes. In 1994, the Gross National Product (GNP) per capita is US$220. In 1989, the reform programme was accelerated, changes became increasingly pronounced and allowed the country to break out of the cycle of economic instability, that has constrained national socio-economic development for many years.

1.2. Education and Training

- Viet Nam is recorded as one of the countries in Asia and the Pacific with a fairly high literacy rate of 88%. The primary school net enrolment rate of the country is 87.4%, however only 57% of children complete primary education.

- The national education and training system is composed of 5 sectors: pre-school education, general education, vocational education, higher and professional education and continuing education or out-of-school education.

- The total number of school children in 1995-1996 school year is 18 million of which 10,218,169 are in the primary schools.

- Almost all communes through out the country have a principal primary school, some bigger communes have 2, making the total number of primary schools in 1995-1996 school year 11,685. Besides, there are thousands of satellite schools which may consist of 1-4 classrooms at the village level for smaller children (grade 1-2). The majority of primary schools are of temporary construction using locally available materials. Most of these schools have no sanitary facilities like latrines, water supply, garbage pits etc. As in the home, children are taught about hygiene, but there are no specific topics and lessons

on sanitation and hygiene.

1.3. The on-going Water Supply & Environmental Sanitation Programme

The Water Supply and Environmental Sanitation has been supported by UNICEF since 1982. Up to now, hundreds thousand of water sources and latrines have been constructed serving millions of Vietnamese people.

However, the development of WATSAN activities is faced with certain problems (such as lack of the people's acceptance, the inability to change of unhygienic behaviours) which can be solved only by hygiene education. Schools were found to be a good channel to convey messages on WATSAN to the community, and of course through the teachers to children. It was also supposed that, in a worst case and due to unforseen reasons, the messages could not reach the community, it would, for sure, reach all the children, the future adults who would make the changes for their generation.

2. PROJECT DEVELOPMENT

2.1. Initial steps

Problems related to Education and WATSAN have been identified after a series of exclusive field trips conducted in 1985 jointly by UNICEF WATSAN staff and the officials responsible for Education. A lot of discussions were made and finally, the issue was brought up to leaders of the Ministry of Education for consideration. At that time, it was very difficult to bring new things to the country and/or to change the old ideas and practices due to political and economical reasons. To push the issue forward, in 1986, UNICEF WATSAN sponsored a workshop on Hygiene Education in primary schools with the participation of officials from the Government Cabinet, the Ministry of Education, the Ministry of Health and the Institute for Educational Science. UNICEF also supported a technical advisory group (TAG) from the Ministry of Education and the Institute for Educational Science to start working on the development of curriculum and textbooks for primary school children (from

Grade 1 to grade 5). It was recognized by TAG that in the schools, if children are taught to follow hygienic behaviours, they have no chance to practice as there are no sanitary facilities neither in the schools nor at home. Theory needed some back-up practice. At that critical point, the WATSAN programme realized that some hardware intervention was needed in the schools, as a hardware/software combination. The process was going on smoothly with a little push from UNICEF WATSAN programme which was then supported by the UNICEF Education programme.

2.2. Project formulation

Being encouraged by UNICEF, the Ministry of Education demonstrated its interest in setting up a project on "Health Education" and finally UNICEF agreed to support the "Health Education project in Primary Schools" as a sub-project of the on-going Environmental Sanitation Project within the WATSAN programme. The project has also been partly funded by the UNICEF-assisted Education programme. In 1990, a project proposal consisting of 2 components: teaching of health education to school children and provision of sanitary facilities in primary schools was prepared by MOET and sent to UNICEF for approval.

2.3. Project Objectives

- To increase awareness and concerns of school children, and through children to their families and communities on hygiene, water, sanitation and health
- To universalize the teaching of Health Education subject in all primary schools
- To provide all primary schools with sanitary facilities (13,000 primary schools by the year 2000)
- To improve the health status of primary school children

2.4. Project Strategy

Integration: As the project involves different agencies, practical and effective integration must be assured, although it appears a very difficult task which was failed in many countries/projects. Thanks to the love given to children by those people responsibles for the project and their flexible and powerful direction/coordination of the Project Management Board Chairman, who is normally the Vice-chairman of the People's Committee (the most powerful body at the province, district or commune levels), project activities were integrated. This is a unique project that can integrate theory with practice.

Community participation: The project requires strong participation of the community

both financially and spiritually. To encourage the commune people and leaders participate in the project, strong and effective social mobilization has been carried out.

Project sustainability: As the curricula and textbooks have been developed, the teaching of hygiene education can be run without further inputs, except for some funding for the teachers' refresher courses. The construction of school sanitary facilities will, step by step, be taken up by the provinces following the demonstration made by the project in some local primary schools.

2.5. Project activities

- Development and finalization of Health Education curriculum and textbooks for school children from grade 1 to grade 5, and the teachers' guidebooks as well.

- Training of teachers on teaching of Health Education subject and on Water and Sanitation techniques as well as on use and maintenance of the school sanitary facilities.

- Construction of school sanitary facilities.

- Mobilization through campaigns/exhibitions/deworming campaigns.

- Monitoring and evaluation.

2.6. Project Funding

- The UNICEF supported Education Programme covers the costs of:

  + Development of curriculum/textbooks/guidebooks
  + Printing of documents, textbooks, teachers' guidebooks
  + Training courses/refresher courses for teachers on Health Education.
  + Research/studies.

- The WATSAN programme covers the costs of:

  + Construction of sanitary facilities in the schools (including water supply and latrine)
  + Training of teachers on WATSAN techniques, use and maintenance
  + Monitoring/Evaluation.

- MOET covers:

+ Cost of project management, costs of staff and transportation
+ Part of the cost for the construction of the school sanitary facilities

- The community and the parents cover the rest of the costs of the facilities

2.7. Distribution of responsibility:

The implementation of the Health Education project involves different agencies, therefore, a close cooperation and integration has to be established. Discussions were held between the Ministry of Education & Training, Ministry of Health, Central Rural Water Supply Project and UNICEF and finally the distribution of responsibility was made as follows:

- **Ministry of Education & Training (MOET)**: MOET is responsible for the management, implementation and monitoring of the project. MOET is also responsible for the setting-up of the project management boards at all levels and assure the coordination among related agencies during the implementation of the project. MOET has to assure the best quality of teaching for the hygiene education subject as well as the construction, use and maintenance of the school sanitation facilities installed. Fund contribution and mobilization is also one of the tasks of the MOET. The Department for Heath and Physical Education of the MOET has been assigned by MOET to take full care of the project.

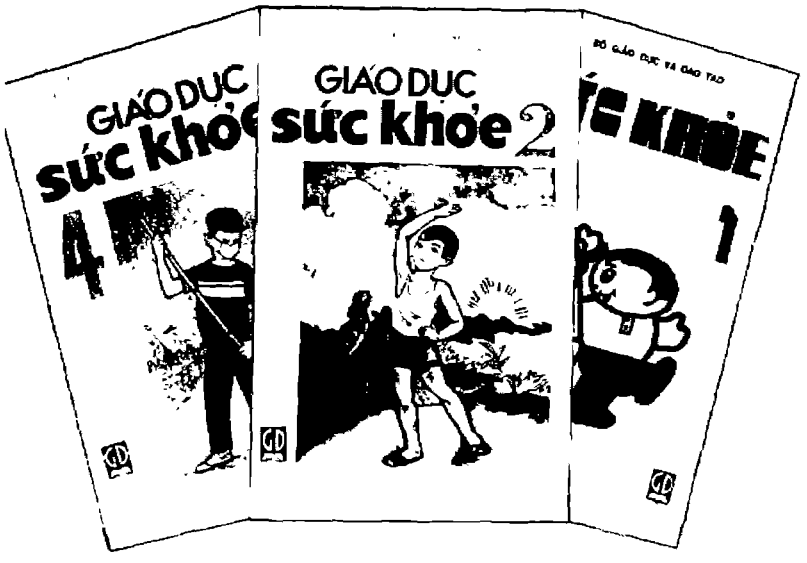
- **Ministry of Health (MOH)**: MOH is responsible for all the technically-related aspects of the project such as the technical requirements for latrine construction, the hygiene and health messages, the health care and parasite control (deworming) in primary schools.

- **Rural Water Supply Project (RWSP)**: RWSP is responsible for the provision of safe water to the school in the project area. Different technologies can be applied depending on the hydrogeology conditions of the areas (tubewell, improved dug well, gravity flow system, rain water catchment tank, slow sand filtration system). Iron removal units are built by the RWSP for every water source as needed. The RWSP also provides on-the-spot training of handpump care-takers and helps the schools to repair the system in seriously damaged cases.

- **UNICEF**: UNICEF is responsible for the provision of funds to cover part of the construction costs and to cover most of the software activities. UNICEF is also working as the adviser/coordinator to assure the proper cooperation and implementation at central and field levels.

2.8. Project Progress

2.8.1. Software component:



After 2 years of efficient work, the curriculum and the textbook were finally approved and in the 1989-1990 school year, this was applied in an experimental scale at 88 schools in 44 provinces of Viet Nam after a number of training courses for teachers on how to teach the health education subject. After a year of implementation, the results were so encouraging that many provinces requested the Ministry of Education to expand the new subject in their provinces. An evaluation workshop was immediately held, with UNICEF support to review the implementation and the curriculum and textbooks as well. The positive outcomes of the workshop resulted in more schools implementing the health education subject. Together with Education and Health Ministries, UNICEF WATSAN once again reviewed the textbooks to summarize the main contents, and it was found out that hand-washing, personal hygiene, use and maintenance of water and latrines were some key messages. It was thus clear, that there was the need for at least a water source and a latrine and some additional facilities in every primary school as support to the software component of Health Education in Primary Schools.

2.8.2. Hardware component:

A survey on the existing sanitary facilities in some primary schools showed that most of those schools had dry latrines (double vault compost or bucket type). All of them were found not to be functioning, very dirty and/or not being properly used. Few schools had safe water sources which, if any, were mainly the unprotected dug wells for boarding teachers.

Basing on the guidelines of the Ministry of Health and on the technical advice of the Ministry of Construction, a number of 10-12 seat septic tank latrines were constructed in about one hundred schools in 1990 in 4 provinces of Thai Binh, Ha Noi, Hai Phong (North of Viet Nam) and Ben Tre (South of Viet Nam). The Rural Water Supply Project provided to each of those school 2 tube wells with handpumps and water filtration/storage tanks. The total cost of US$1,000 - US$1,200 for system was all covered by the UNICEF WATSAN programme.

All of these sanitary facilities were put into operation without any difficulties and they were well accepted by the schools and the children. However, it was difficult to know if the facility was appropriate in terms of design, usage and maintenance. It was, therefore, necessary to have some quick evaluation and the WATSAN Reference Centre of the Medical College of Thai Binh was financially supported by UNICEF for conducting this important analysis. The evaluation was made in the form of a survey with interviews (questionnaires), focussed interview (discussion with key persons) and observation. The evaluation also focussed on the hygiene behaviours and preferences of boys and girls in the primary school age group. Following are the findings of the survey:

- ☹ The designs were bigger than the number of users.
- ☹ The arrangement of some designs were not appropriate (proportion for boys and girls, or that for defecating and urinating)
- ☹ There was the need for hand-washing arrangements
- ☹ The use of construction materials needs to be specified, and based on the materials available locally.

Given these shortcomings, a study with terms of reference prepared by UNICEF WATSAN was found to be of great importance to finalizing the designs for different categories of primary schools with different numbers of pupils. The Thai Binh Medical College (MOH) and the School Design Institute (Ministry of Education and Training) were selected to conduct the study which was financially and technically supported by the UNICEF WATSAN programme.

While awaiting the final results of the study, many of the findings were immediately applied at the field such as the scope the facility in comparison with the number of pupils

in the school, the enlargement of the urinating area etc.

In the meantime, the teaching of the Health Education subject was extended to large numbers of primary schools in the pilot provinces. Short refresher courses were organized for teachers on the subject. The curriculum and textbooks continued to be tested.

By end of 1991, the designs of sanitary systems for primary schools were finalized as were the results of the study. Thousands of copies were distributed to all provincial Departments of education and to schools as well.

It was found that there was a need to develop a manual on use and maintenance of the school sanitary facilities. The guideline on use and maintenance of sanitary facilities in primary schools is an attachment to the booklet on "Designs of the sanitary systems in primary schools" and it is used as a supporting document to the Health Education Curriculum and textbooks.

The results of the initial activity in primary schools were delivered to the Vice-Minister of the Ministry of Education and Training, who immediately showed his concern and interest. In the Evaluation Workshop held by the end of 1991, he decided that the Ministry of Education and Training would share the cost of the school sanitary facilities by providing US$200 per school. This is a great success as it is the only project that has a "clear-cut" contribution from the counterpart. Also at the workshop, it was decided that the project should expand to a larger scale with a large number of schools teaching Health Education and with more number of schools constructing sanitary facilities.

As the government recognized its responsibilities related to Health Education in Primary Schools UNICEF decided to limit its supports to the project as follows:

- to reduce the contribution per system from US$1,000.00 down to US$500.00 (in kind and consisting of cement/iron bars)

- to focus the support to software activities such as the training, workshops, document development and printing of textbooks for pupils and guidebooks for teachers.

The hardware support from UNICEF (US$500) and from the Ministry of Education and Training (US$200) comprise for two third of the total cost of the construction, therefore, further contribution were required which could be from no other than the community and the pupils' parents. Fortunately, the call for joint effort received positive response of the local authorities and the parents' associations. Parents were motivated to contribute cash and/or

labour for the construction while local People's Committee committed to cover the rest of the cost whether in cash or in kind (e.g locally available materials such as bricks, sand and transportation).

Thanks to the provision of anti-helminthtics drugs (mebendazole) from UNICEF, mass dewormings campaigns were launched in hundreds of schools in 1991 and 1992 during the "Hygiene Education Campaigns and Exhibition" with the support of the local health workers. Given the fact that all activities being conducted in the schools are for their children, the parents and the community participation was automatically created. The project has, therefore developed very quickly and the possibility to expand the project to all provinces through out the country was visible.

In 1992, based on the achievements made and the experience gained, the Ministry of Education and Training decided to universalize the teaching of Health Education subject in all primary schools. Based on that decision, Health & Environmental Education became the 9th compulsory subject to be taught at primary schools on the basis of 2 periods (45 minutes each) per week, making the total number of time given to the subject 66 periods per school year. The Ministry of Education and Training also requested that examinations should be given at the end of each school term (2 terms/year). A great part of the UNICEF fund for Health & Environmental Education Project in the Programme was used for printing the textbooks and teachers' guidebooks. The cost for training of teachers was shared by both Education and WATSAN programmes. Due to the limitation of fund allocated to WATSAN, UNICEF decided to reduce its contribution to US$300 per school for construction of sanitary facilities. This, at the beginning, caused some confusion to the counterparts. The problem was finally solved when the Provincial Education Department came up with their willingness to increase its support to the project/schools in the province. Under the supervision of the Provincial Education Department, the school sanitary facilities have been constructed by the district construction office (under contract) or by the commune mason (under assignment of the Commune People's Committee).

By the end of 1998, 100% of the primary schools through out the country have been covered by health education teaching and 5,081 (nearly 40%) provided with WATSAN facilities of which 3,410 systems were made with UNICEF's partial assistance and the rest by the Government/people themselves. In addition, more than 1,000 day-care centres and kindergartens have been provided with water and sanitary facilities in the same pattern.

2.8.3. Further development

Further developments have been made during the implementation process to ensure that the project is more effective and more attractive. These are:

- ☺ The introduction of VAC eco-system[1] to the schools and to the teachers teaching health education. With US$50.00 per school and US$50.00 per teacher for 5 teachers, the VAC system was set up and has functioned very nicely. Fruit trees are planted, fish and animal (pig, hen ...) raised by the schools and teachers who get additional income to purchase more teaching aids and to repair the schools. Together with sanitary facilities, the VAC system makes the school environment much more pleasant.

- ☺ The competition of teachers on teaching health education organized annually by the provinces and the "child-centred methodology" using the Life Skills Approach in teaching health education introduced. These development have improved the quality of teaching - learning process.

- ☺ Health care for school children: the implementation of the project has resulted in more attention being given to the school by the local authority, related agencies and by the community. Many schools have conducted annual health checks for children with the support of the communal/district health centres. Many schools get special arrangements in the schools for dental care (special room, equipment, fluoride water ...)

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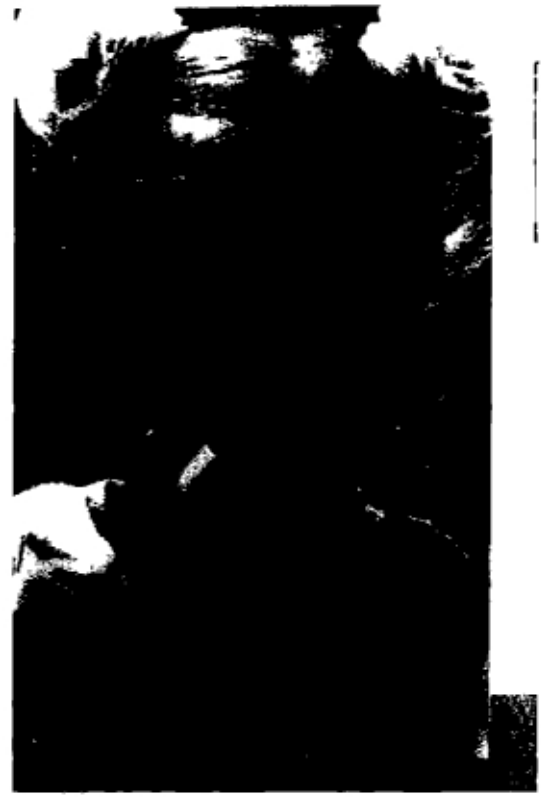
[1] *~~VAC~~ eco-system. V.A.C are initials of the 3 Vietnamese words:*

V stands for "Vuon" or "Gardening"
A stands for "Ao" or "Fish-raising"
C stands for "Chuong" or "Animal husbandry"

The VAC eco-system is aimed to increase nutritional status of the family members and to generate incomes of the family/schools.

☺ With the income generated by VAC system and the fund contributed annually by the school children (normally US$1.0 per head per annum), the school purchases soap for hand-washing, a water filter to provide safe water for drinking and also pays for sanitary facilities maintenance costs. Handpumps are being replaced with electric pumps in many schools.

☺ Development of advocacy materials: To support the teaching of health education, a set of 10 posters on hygiene, health, sanitation, water has been developed and printed to distribute to all primary schools. The magazine in the form of a newsletter has been published on a quarterly basis and circulated to all ministries and provinces, covering all information, experience and up-dated data relating to the project.



☺ Non-formal health education: The project also aims at the out-of-school children through the involvement of the "Young Pioneers", an organization of 6 million advanced pupils aged from 9-14. Beside their promotional activities conducted in the schools, they are also providing "non-formal education" in the community and in the "Children's House" through various types of performance: plays, drama, poems, songs, home visits.

☺ Health insurance: Many provinces are introducing health insurance for school children. Agreement was made between the Insurance Company and the Education Service that 35% of the insurance fee collected (at an average of US$1.0 per pupil per year) will be given to the school to cover the following activities on health:

- Health care: medical kit, dental equipment, drugs, first aids.
- Construction of school sanitary facilities.
- Maintenance of the facilities.

☺ Health education in primary schools in supporting the household sanitation project: After constructing sanitary facilities, many schools came up with further steps by encouraging the parents, through their school children, to construct latrines for their families. Children are encouraged to fill in the registration forms and bring them home to their parents who are persuaded to build the household latrines. Teachers, communal health workers and leaders become the ones who voluntarily build new hygienic latrines,

setting good examples for others in the community to follow.

- ☺ R & D studies/research: In conducting the study on designs of school sanitary facilities, the Medical College of Thai Binh made a trial to connect the sewage tank of the septic latrine to the pond to raise fish. The results of this "additional effort" is prepared in a separate report. By the end of 1996, a study on designs of school sanitary facilities for mountainous areas was conducted to assure the appropriateness of the technology to different regions of the country. An Evaluation on the use and maintenance of the sanitary facilities conducted in 1998 showed encourageing results. Another evaluation is ongoing in 1999 on the Impacts of School Sanitation and Hygiene Activities.

- ☺ Revision of health education curriculum and textbooks: After 5 years of implementation, although some revision has been made in the form of correction papers, or additional handouts, it was found out that the final revision of the curriculum and textbooks should be made. In April 1996, a workshop was held with participation of UNICEF staff, officials from MOET and related agencies. The final version of the curriculum and textbooks have been approved by MOET leaders and is ready for printing. Quality (both in term of lay-out and messages) has been improved. More messages on environment, nutrition and HIV/AIDS was be added.

- ☺ As mentioned at the beginning, beside the principal schools, there are thousands of satellite schools, kindergartens and creches which should not be left out. These are being covered by the Sanitation Project along with the construction of household latrines in the community. Of course, the facilities there are smaller and simpler.

3. Project Potential

Recognizing the importance of water supply and environmental sanitation for rural area in general and for schools in particular, on 29 April 1994, the Prime Minister issued the Instruction No. 200 to all provinces and related agencies/ministries on "Ensuring Safe Rural Water Supply and Sanitation".

Immediate positive actions have been taken by most of the provinces by allocating local funds and assigning responsible agencies to materialize the Instruction. Within 2 years, in some provinces, 100% of schools have been covered firstly by water supply and many others set goals to cover all primary schools with WATSAN facilities by 1997 or before 2000.

4. Constraints/Shortcomings

- The biggest constraint of the project is the shortage of funds from UNICEF. With the allocated general resource (GC) the number of schools covered per year is about 200 and maximum 500 in cases where supplementary fund (SF) is provided. Although great efforts have been made by the Government, external support is also of great importance to reach the goals of 100% coverage (13,000 primary schools) by 2000. This funding problem becomes more serious in the mountainous and remote areas where people are extremely poor and their education level is very low.

- Maintenance of the facilities is one of the shortcomings. In some regions, as teachers and children are used to the dry latrines, they tend to block the new facilities with paper, or forget to flush it after each use. This problem is being solved as extensive training is being conducted and new textbooks introduced. In many schools, an additional amount (normally US$3-US$5/month) has been paid to the guard to take care of the sanitary facilities. This can assure the cleanliness of the latrine but it limits the participation of school children in practicing hygiene.

- Due to the shortage of funds, the supply of anti-helminthic drugs has been

discontinued after 2 years of implementation. Therefore, the hygiene education campaigns/exhibitions launched together with the deworming which is the entry-point for Hygiene Education becomes weaker. Although the call for support was made, no positive response from Health Programme was obtained. Support from other sources may be possible, and are presently being explored.

5. Lessons learnt

Commitment to children: The commitment to children made by the leaders at all levels and by community people is the decisive factor for the development and the success of the School Sanitation and Health Education Programme. Social mobilization through the "Love for Children", "Children first", the "Convention on the Rights of the Child" will lead to such a commitment.

UNICEF as an "adviser"/booster: At every step of the development process, UNICEF WATSAN and Health Education programmes should advise and encourage the government counterparts to move forward. Certain supports need to be delivered at critical moments.

Integration: The successful integration among various agencies is a good experience for other projects/programmes and countries. The role played by the Coordinator, the clear distribution of responsibilities are key factors for a good integration.

The software-hardware combination: This combination is very important to assure the effectiveness of the School Sanitation and Health Education project activities. This is the combination of theory and practice, which should not be separated.

The interaction between school sanitation and health education and the household sanitation: The WATSAN programme helps install the sanitary facilities for school children who help transmit the WATSAN messages to their parents and community.

Project sustainability: The current development of the project has shown its sustainability. As the support from UNICEF is decreasing and that of the locality is increasing, the project can run by itself in the near future. UNICEF will then focus support to the poorest of the poor or to the more critical problems.

The involvement of mass organizations such as the Young Pioneers Council has helped improve not only the sanitation and hygiene in the schools but also covers out-of-school children.

The project has been developed further than it was planned and expected. These development has made the project more lively and sustainable. The linkage between school

and community, including the commune health center has been established. This creates favourable conditions for the development of education and health care for the children.

6. Reference:

- Guidelines on Use and Maintenance of the School Sanitary Facility, Ministry of Education and Training 1993 and 1997.

- Alternative Basic Education in Viet Nam, Vu Ngoc Binh, 1996

- Master Programme of Operations (MPO) for 1996-2000, UNICEF - Government of Viet Nam.

BỘ GIÁO DỤC VÀ ĐÀO TẠO

VỤ GIÁO DỤC RÈN LUYỆN THỂ CHẤT

HƯỚNG DẪN XÂY DỰNG, SỬ DỤNG VÀ BẢO QUẢN CÔNG TRÌNH VỆ SINH TRƯỜNG HỌC

Analyse comparative des performances de divers systèmes de gestion déléguée des points d'eau collectifs

ALFA / BURGEAP

L'objectif initial de ce travail était " l'élaboration d'un outil méthodologique afin de guider les choix en matière d'organisation de la gestion des points d'eau collectifs dans les petits centres et les quartiers périurbains ". Il s'agissait ainsi de mieux comprendre les conditions régissant le bon fonctionnement des différents systèmes de gestion déléguée et d'aider la démarche de prise de décisions concernant les modalités de gestion des points d'eau collectifs. L'originalité du travail repose sur la variété des cas analysés, variété géographique et des modes d'organisation du service d'eau, ainsi que sur la diversité des expériences et du cursus de chacun des membres de l'équipe et donc de l'approche du problème posé, venant enrichir une réflexion collective méthodique. En réalité, cette diversité des objets et des approches a rendu le travail d'analyse et de synthèse assez complexe, et les attendus de départ comme " l'élaboration d'un guide méthodologique ", ont évolué progressivement vers des résultats moins ambitieux, plutôt de l'ordre des recommandations et d'éléments de réflexion d'ordre méthodologique.

Pour mener à bien l'objectif de l'action de recherche, deux types d'actions ont été menées : des études de cas au Burkina Faso, au Sénégal et en Guinée et des réunions en groupe de travail (huit au total) à Paris.

Deux types de documents ont été produits, des monographies (volume 2 du rapport final), des communications thématiques, par auteur, ainsi qu'une synthèse et des recommandations discutées en groupe de travail (volume 1 du rapport final).

L'équipe de recherche a choisi de se placer d'emblée :

- du point de vue de la gestion d'ensemble du service (qui tend de plus en plus à combiner desserte collective et individuelle) ;
- et du point de vue de la construction du système d'acteurs et de la gestion de sa diversité (qu'il comporte ou non délégation).

Pour reformuler le problème, nous dirions que les formes de gestion mono-acteur (communauté, ou entreprise publique nationale) ne sont pas adaptées aux territoires que nous étudions ici ; dans le même temps, s'inventent partout de nouvelles formes qu'il faut évaluer pour savoir à quelles conditions elles peuvent générer une gestion durable. Un certain nombre des propositions qui suivent sont déjà testées dans certains pays, parfois institutionnalisées, parfois aussi déjà questionnées. C'est ce processus d'apprentissage qui est porteur d'avenir.

Les paragraphes qui suivent détaillent les propositions issues de ce travail. Toutes ont pour objectif final de mettre en œuvre des dispositifs de gestion durables, c'est-à-dire susceptibles d'évolution et d'adaptation aux changements affectant leur environnement.

Développer une réflexion conjointe sur petits centres, petites villes, et périphéries urbaines

Alors que la tendance actuelle est de les traiter séparément et différemment, on pourrait favoriser la convergence des stratégies mises en œuvre sur ces différents types d'espaces. Il est pour cela nécessaire de dissocier la logique et l'échelle territoriale du projet, de celles des dynamiques gestionnaires qu'il tend à promouvoir. Cela suppose notamment que le projet ne soit pas conçu comme un " tout " introverti, autosuffisant et autorégulé, mais comme une contribution :

- à une politique nationale de l'eau organisant la cohérence des interventions sur l'ensemble du territoire ;
- à la construction progressive, à la bonne échelle géographique, d'opérateurs professionnels, tout comme d'outils efficaces pour l'entretien et la maintenance, pour la gestion de l'épargne, voire la péréquation, etc. ;
- à la construction d'une capacité de régulation de proximité, régionale et locale, capable d'accompagner les processus d'apprentissage, et le renforcement des acteurs.

La bonne échelle de réflexion est donc l'agglomération, ou la " région " : la difficulté des sociétés nationales à assumer réellement le service dans les périphéries populaires et leur tendance à se retirer des villes petites et moyennes non rentables accentueront le besoin d'une stratégie de prise en charge des services d'eau élaborée à l'échelle de chaque région ou agglomération, et non plus seulement de chaque localité ou de chaque quartier. De même, la diversité de formes de gestion et de types d'opérateurs, à l'intérieur de la même localité tout comme à l'échelle de la région, s'impose aujourd'hui comme un fait. Le véritable enjeu, commun aux périphéries urbaines comme aux petits centres, c'est donc de gérer cette inévitable pluralité d'acteurs, d'opérateurs, et d'échelles

d'action.

Promouvoir une vision dynamique du service et de sa gestion

Il s'agit de promouvoir, par les moyens suivants, une vision dynamique de la demande, de

la gestion et de la responsabilité du service :

- une vision dynamique de la demande : toute anticipation trop forte sur la demande (sur le volume consommé, ou par des programmes de branchements individuels trop volontaristes) conduit à l'échec. A l'inverse, toute définition statique de la demande bloque les dynamismes démographiques et spatiaux ; il faut concevoir des systèmes évolutifs et prévoir dès l'origine les mécanismes de ces évolutions ;

une vision dynamique de la gestion : clarification progressive des règles de tarification, de financement du renouvellement des divers types d'installation, des modalités de gestion de l'épargne ;

une vision dynamique de la responsabilité du service : réarticulation progressive de la gestion de l'eau au processus de décentralisation et de responsabilité locale, clarification du rôle de maître d'ouvrage.

Clarifier les rôles et fonctions des acteurs / opérateurs

De façon à accompagner la diversification des acteurs/opérateurs et l'intervention croissante d'acteurs privés, il s'agit de :

rechercher des relations triangulaires stables distinguant progressivement de manière plus claire :

1. la responsabilité de fourniture du service (comité de gestion ou association d'usagers ou société nationale) qui peut être ou non une autorité concédante ;
2. la responsabilité du fonctionnement quotidien du service, souvent assumée dans les faits par un binôme d'opérateurs du type gérant/fontainier salarié (comité/fontainier, opérateur privé/fontainier) éventuellement complété par la sous-traitance de l'entretien et de la maintenance ;
3. la responsabilité de régulation (un tiers à identifier). Mais en sachant qu'il y a plusieurs combinaisons possibles ;

clarifier le rôle et la composition des comités d'eau dont la création ne va pas de soi : le processus devrait en être encadré ;

contractualiser les divers mécanismes de délégation en cascade en favorisant une pédagogie de la délégation : énonciation claire des devoirs, de l'autorité de contrôle et de recours ; affichage convaincant et mise en œuvre effective de sanctions ; " intéressement " des gérants à la bonne gestion des installations, mise en œuvre de mécanismes réguliers d'évaluation/ " renégociation " des contrats ;

utiliser le contrat non comme une règle statique, mais comme un processus d'apprentissage et de construction de la légitimité de chacun des acteurs.

Favoriser l'émergence de cultures techniques et gestionnaires locales

Cet objectif peut être atteint par la construction progressive d'opérateurs professionnels, ce qui implique de :

renoncer au bénévolat comme principe " normal " de mobilisation des compétences ;

organiser une professionnalisation progressive des statuts des acteurs impliqués ;

organiser à la bonne échelle l'appui technique à cette professionnalisation.

Décloisonner les approches de la gestion de l'eau

La poursuite de cet objectif impose de :

rechercher les économies d'intégration en favorisant les synergies entre services

(projets multisectoriels) et l'intégration des différentes demandes (des ménages, des artisans, des éleveurs, etc.) ;

resituer les enjeux de l'eau dans ceux, plus vastes, de l'aménagement et de la gestion urbaine des petits centres et des périphéries urbaines ;

articuler la régulation des opérateurs de réseau avec celle des autres modes d'accès à l'eau. Identifier le porteur d'une responsabilité globale (l'accès à l'eau de toutes les populations, sous toutes ses formes, et notamment la question des populations non desservies : définition d'un " droit à l'eau " dans ces espaces en cours de mutation ?).

Ces trois enjeux existent au niveau national, mais sont particulièrement cruciaux aux niveaux régional et local.

Ne pas figer le catalogue des solutions " légitimes "

Face aux incertitudes concernant le rôle futur des municipalités, des opérateurs publics, des opérateurs privés grands et petits, des structures associatives ou coopératives, il s'agit d'élargir le champ des possibles en s'efforçant d'une part de confronter l'expérience ouest-africaine à celle d'autres régions du monde, d'autre part de maintenir une veille permettant d'identifier et d'évaluer les expériences innovantes - même si elles sont atypiques - et de diffuser l'innovation. On observe ailleurs en Afrique, en Amérique latine, en Asie, des réponses différentes de celles données dans les pays étudiés ; mais cette ouverture et cette confrontation, que même les bailleurs de fonds agissant dans plusieurs régions ne parviennent souvent pas à réaliser, n'ont pas été suscitées. Cet objectif pourrait être inscrit dans la suite du programme dans lequel les présents travaux se sont inscrits ou dans un nouveau programme, non seulement sous forme de recherches mais aussi sous forme de mise en réseau des acteurs eux-mêmes.

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Pays concerné(s) : Sénégal, Burkina Faso, Guinée, Niger, Bénin, Namibie, Mali

Axe(s) de recherche concerné(s) : 2.1 ; 4.1

Milieu(x) concerné(s) : quartiers périurbains et petits centres

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