

## 2.2.4 Commune Level

### Xuan Dinh Commune People's Committee

A field visit was conducted to Xuan Dinh Commune. Meetings were held with the Chairman of Commune People's Committee (CPC). The commune consists of 6 villages (Dong, Trung; Nhang, Loc, Cao Dinh, and Tan Xuan) with totally 18.000 inhabitants.

The organisation of the Commune People's Committee is outlined below.

The Commune People's Committee has the following sections:

Section/Function	Staffing
Management Board (Chairman and Vice-chairman)	2
Military	2
Police & Security	3
Culture & Social Matters	2
Administration	2
Finance & Accounting	2
Land/Property Management	2
<b>Total</b>	<b>15</b>

The most relevant sections for RWSS is the Financial Section staffed with 1 person with a university degree in economic and 1 college graduate. The Administration Section has 2 staff with college degrees. In addition there are several mass-organisations including:

- Women's Union;
- Soldier's Union;
- Farmer's Union; and
- Youth Union.

The most relevant union regarding RWSS is the Women's Union. All matters dealing with developments within agriculture areas are related to the administration of agricultural co-operatives.

It appears that CPC is very limited involved in any kind of infrastructure development as this is provided by Hanoi municipal and district authorities. Presently the most households have only access to water from drilled wells through the use of hand pumps. Some poor households have only access to public wells where the water is of bad quality. The CPC do not provide any water facilities except for the public wells.

Although some experience on utility management has been obtained by selected CPC staff through employment in the agriculture co-operatives the CPC have very limited experience in

managing public utilities. As most infrastructure facilities are provided by Hanoi municipal and district authorities including waste collection and other services. Service fees are collected directly by the utility companies (VND 500/month/household) without involving CPC. Tax revenue collection is however done by the CPC. It appears that revenues collected by CPC has to be dispatched directly to the national authorities (MOF) which then reallocate funds according to approved budgets. Only 10% of collected revenue can be retained on a separate bank account for the CPC to dispose. This can be a critical issue if water fees are to be collected and managed by the CPC. Further investigations are therefore needed on this subject.

#### **Xuan Dinh RWSS Management Board**

A RWSS Management Board was established in 1997 when the commune became a pilot commune rural development. The board was initiated through a decision made by the Hanoi Municipal People's Committee and the District People's Committee. There are 15 board members including:

- The Chairman of the People's Committee (Chairman of the RWSS Board);
- Vice-chairwoman of the Women's Union;
- Representatives from the other unions;
- Chief of the Commune Health Centre;
- One member of the CPC;
- Chief of Villages;

Three meetings has been conducted so far with representatives from the District People's Committee attending. The main agenda is to review the water and sanitation situation and outline actions to be taken by the different responsible authorities. Last meeting the topic was pollution/waste from a nearby factory disposing waste into the nearby stream and causing diseases in the commune. A resolution was made and a complaint forwarded to the factory supported by a delegation and meetings with the factory director. No action has been taken so far on RWSS.

#### **Xuan Dinh Commune Health Centre**

The meeting was held with the Chief of the CHC. The CHC has a very nice appearance and made a good impression.

The Commune Health Centre (CHC) is organised separately from the Commune People's Committee (CPC). CHC is reporting to the District Health Centre but is also responsible to the CPC who makes plans and implement decisions made by Commune People's Council and district authorities.

The CHC has 7 staff and headed by a nurse. The CHC has also 1 medical doctor assisting the CHC Chief with prescribing medicine and medical care. The other nurses were responsible for birth, mother and child care, family planning, vaccination and disease prevention.

Generally, CHC shall perform the following:

- Conduct awareness campaigns together with Commune People's Committee members and village/hamlet chiefs;
- Promote use of clean latrines and how to produce safe water;
- Take regular water samples and dispatch them to DHC for testing.

Monthly reports are sent to DHC upon which meetings are held with DHC and CPC.

Preventive health care campaigns are held twice a year - before summer and before winter seasons. The campaign includes the importance of drinking clean water and using (clean latrines). In addition campaigns are held if there is an outbreak of any contemptuous disease. Campaigns are generally done through public media using loudspeakers mounted in the villages as well as conducting village meetings.

The CHC also conducts household visits to check the standards of latrines and cleanness. No water samples are taken, however, so it is difficult to establish if any sickness is waterborne.

In 1996 a campaigns was conducted to improve the sanitary conditions in the commune. Materials for building latrines and wells were provided through the CPC by UNICEF (500 brick and 2 bags of cement). The District Sanitation and Disease Prevention Team together with the CHC conducted the IEC campaign. Today 80% of the households have latrines and 90% have wells and hand-pumps. However, the CHC do not check water quality and there is very limited monitoring on proper use. Due to this no statistics exists on household performance on RWSS.

## 2.3 Ninh Binh Province

### 2.3.1 Introduction

#### The Objectives of the Study Trip

A study trip to Ninh Binh province was conducted on October 2 and 3 1998 to assess organisational and human resources issues of the main stakeholders involved in RWSS at province and district level e.g.:

- The Provincial Department of Agriculture and Rural Development including Provincial CERWASS;
- The District Offices of Agriculture and Rural Development
- The Provincial Department of Health
- The District Health Centres
- Mass-organisation (Women's Union).

The main objectives were to:

1. clarify their role in RWSS and the responsible section or office dealing directly with RWSS;
2. organisation, staffing and resources provided towards RWSS;
3. links and co-operation with other organisations;
4. on-going programmes, projects or activities within the project area;
5. programming, planning and evaluation procedures for RWSS activities;
6. main problems as viewed by the stakeholders.

Based on the findings a profile of the RWSS sector will be outlined - from the national level down to commune level. The profile will not, however, include details of the target communes as this is done in connection with the commune survey.

The profile will be used when addressing the involvement of the different stakeholders in each phase of the projects cycle (planning, implementation, operation & maintenance (O&M), monitoring and evaluation) e.g. in order to sustain and further develop the RWSS facilities established through JICA assistance:

1. How are the O&M of RWSS facilities to be organised and conducted;
2. What roles are the different stakeholders to have to support O&M of RWSS facilities at commune/village level;
3. What kind of HRD support will be necessary to provide through the project at each level to sustain O&M of facilities.

Confronting the selected RWSS technology and its operational requirements with the capabilities and capacities of the target communes as well as other support organisations, a HRD programme can be outlined addressing the skills, know-how and attitude as well as

organisational issues necessary for sustainable O&M of RWSS facilities.

### Description of the Province

Ninh Binh province lies about 90 km south of Hanoi and is one of the smallest provinces of the country in terms of both natural area and population. Topographically the province is very diversified with mountainous and hilly landscape to the west along the Lao boarder and a narrow coastal plain to the east. The province covers an area of 1400 km<sup>2</sup> with a population close to 861,000.

Ninh Binh province is divided into 8 administrative: 6 districts and 2 towns.

### Target Area

The following districts and communes have been selected for the study.

District	Commune
Tam Diep Town	Quang Son
Yen Mo	Yen Thang
Nho Quang	Dong Phong

Due to time constraints meetings with district representatives were conducted in Ninh Binh town. However, to get some hands-on impression a field visit was conducted to Yen Thang commune as well as to the Yen Mo district institutions. Meetings with provincial authorities were held at CERWSS and other provincial department offices.

### Stakeholders Met

At province level meetings were held with:

- CERWASS;
- Provincial Department of Health;
- Women's Union

The main actors within the RWSS sector are CERWASS, Department of Health through the Provincial and District Medical Centres and Commune Health Centres. Women's Union is also involved to a great extent, especially within activities related to IEC campaigns and credit systems. It was therefore decided to cancel the meeting with DARD and spend more time with CERWASS, as this is the main agent for RWSS from the side of DARD.

During the district visit, meetings were held with the:

- Vice Chairman of the District Peoples Committee;
- The Chief of District Agriculture and Rural Development Office
- The Director of District Health Centre;
- Yen Thang Commune Health Centre;
- Representatives from Provincial, District and Commune People's Committees

### 2.3.2 Provincial Level

#### **Provincial RWSS Management Board**

The Provincial RWSS Management Board was established in 1994 with branches at district level. Commune RWSS Management Boards has still not been established.

Members include Provincial People's Committee members (the Vice-chairman of the PPC is the Board Chairman); Department of Science, Technology and Environment; Department of Health; DARD; Department of Finance; Department of Planning & Investment; Women's Union; CERWASS.

All planning on RWSS are done by CERWASS and Department of Health the main functions of the board are: to co-ordinate efforts in order to reach state provincial targets; monitor and evaluate performance according to set targets; solve recurrent problems and make recommendations on annual planning within the RWSS sector.

There is no master plan or compiled action plan covering the RWSS sector.

The board meets every quarter and holds annual general assembly meetings.

#### **CERWASS**

##### **Mandate and Main Objectives**

The centre was established in 1983 to work with UNIFEC and other international organisations in RWSS. In its initial phase CERWASS was only responsible for water supply but since 1995 when it was transferred from Minister of Labour, Invalids and Social Affairs (MOLISA) to MARD it has (in principle) also been responsible for environmental sanitation.

The main objectives of the centre are to:

1. Evaluate present water supply systems;
2. Assist the province in planning (short, medium and long-term) water supply;
3. Organise and implement projects;
4. Share domestic finances to execute work;
5. Implement water supply projects supported by UNICEF;
6. Authorised to make proposals supported by domestic organisations and international donor agencies;
7. Carry out campaigns on environmental management and protection - train staff to do this;
8. Construct pilot projects on RWSS

All communication goes through DARD, which instructs CERWASS on selection and implementation of RWSS project.

##### **Organisation, Functions and Staffing**

The present organisation of Ninh Binh CERWASS is outlined overleaf.

The centre is headed by a Director (BA in law) and supported by 2 Vice-directors (1 BA in law 1 BSc in geological engineering). Together they constitute the Management Board. The

Director has had his position since 1992. Total staff is 46 of 17, which have university degrees (BSc or BA), and 2 have technical college degrees. The technical specialists includes:

2 in economy and law (BA)

9 engineers with BSc:

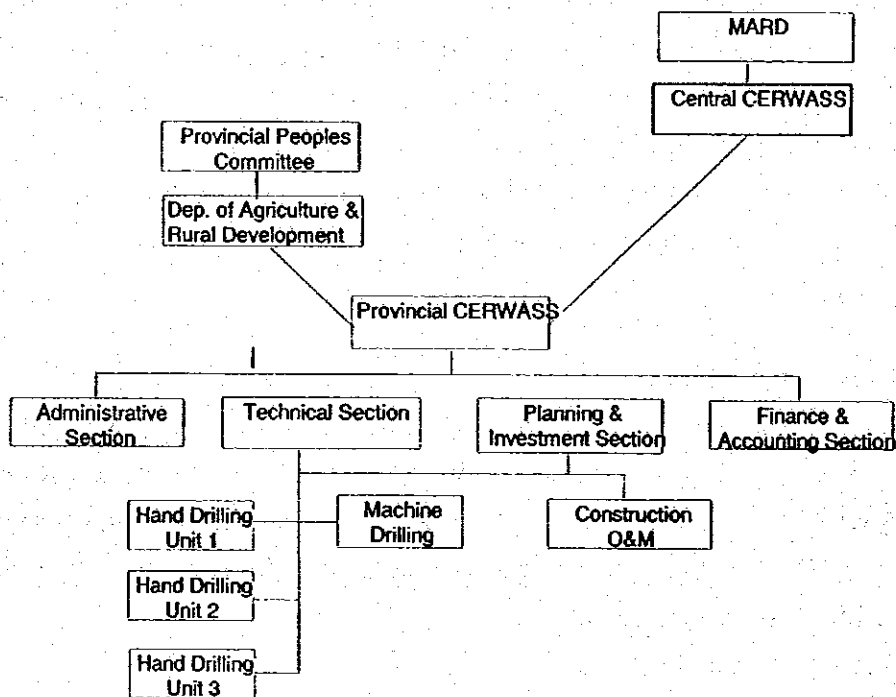
1 hydrologist (BSc)

2 drilling experts (BSc)

1 construction and irrigation engineer (BSc)

2 hydro technicians (BSc)

2 technicians



An outline of the staffing pattern is presented below.

Category	Mgt. Board	Adm.	Technical	Planning	Accounting	Hand Drilling	Machine Drilling
Univ. grad	3	2	2	2	2	1	1
Technicians			2				
Workers		3			1	21	6
<b>Total = 46</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>22</b>	<b>7</b>

The functions of Ninh Binh CERWASS do not diversify from the functions performed by the other provincial CERWASS visited and is therefore not repeated here. Closer attention is given to the planning and implementation procedures of RWSS project (or more correctly WS projects as CERWASS involvement in sanitation is close to nil).

#### **Project Cycle as Applied by CERWASS**

The following steps and procedures are applied in connection with CERWASS' involvement in RWSS:

1. CERWASS initiate investigations on commune level to identify waters supply needs. This is done in a random manner as no master plan or priority/action plan on RWSS exists. In some cases the investigation is done on request from CPC in some cases investigation is initiated by CERWASS on the possibility of receiving funds from UNICEF or other (international) organisations. If the preliminary investigations justify the possibility of a water supply project, the CPC is asked to make a formal letter, which is dispatched, to DARD and CERWASS via the responsible district authorities (Agriculture and Rural Development Office).
2. After receiving a formal application (letter) provincial CERWASS conduct a pre-feasibility study on the water source conditions and make an agreement with the CPC to apply for funds and approval from PPC and the national level (CEWASS and MARD).
3. Preliminary technical design and cost estimates are then forwarded to CERWASS at national level for approval. The project is then added to the number of projects received from other commune/provinces. The collected projects are then evaluated and selected by central CERWASS according to available financial resources from UNICEF or the national budget.
4. Upon approval of the technical preliminary design a letter is sent back to provincial CERWASS via DARD and PPC. Possible contributions are then evaluated by the PPC and eventually put on the financial plan for the coming year or taken form the present budget if there is an urgent need (draught or flooding).
5. Upon approval by the PPC CERWASS conduct a feasibility study and a commitment by the community to contribute to the project financially and through labour (contract). It is stipulated that 2 man/months are used to make a feasibility study. Main inputs are from the technical section.
6. A project outline is then submitted to DARD and central CERWASS for approval and budget allocation.
7. In most cases the Provincial Department of Construction or a company with a license to do such work then completes the technical design<sup>4</sup>. It appears that provincial CERWASS does not have the authority to make detailed design and cost estimates/budget. The final

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<sup>4</sup> Stipulated price is VND 3.8 mill./km of piped system.



design is then dispatched to the same authorities once more for final approval.

8. Upon receiving the funds, the project is put on an open tender if the budget extends VND 500 mill. If the budget is less CERWASS select a licensed contractor to construct the facilities. A selection committee is established with members from Department of Construction and Department of Planning and Investment. The contractor has to provide 1) a letter of intent; 2) make a financial deposit and present a bank insurance guarantee ; 3) present their license and legal status; 4) provide tender cost estimates (based on technical specifications provided by CERWASS)
9. The selected contractor has then to be approved by the DARD, the PPC and national CERWASS.
10. Provincial CERWASS the make all the necessary preparations related to the contract (the involvement of the commune people and their contribution and the financial arrangements with the contractor) before the budget is released.
11. Before construction starts CERWASS establishes a Construction Management Board with members from: 1) provincial CERWASS (one engineer and one from the Accounting Section); 2) the District People's Committee; 3) The Commune People's Committee. The provincial CERWASS director heads the board. The main functions of the board includes 1) signing of contracts; 2) monitor/inspect and evaluate implementation; 3) approve and perform handing over procedures.
12. During construction CERWASS perform supervision and control of construction as well as the drilling of wells.
13. Upon completion of construction, provincial CERWASS does training of facility operator (if a piped system is applied).
14. Handing-over procedures and final approval completes the project cycle.

In 1997 6 projects were proposed by provincial CERWASS, 3 project were approved by higher authorities for completion of feasibility study while 2 technical designs were completed and 1 implemented.

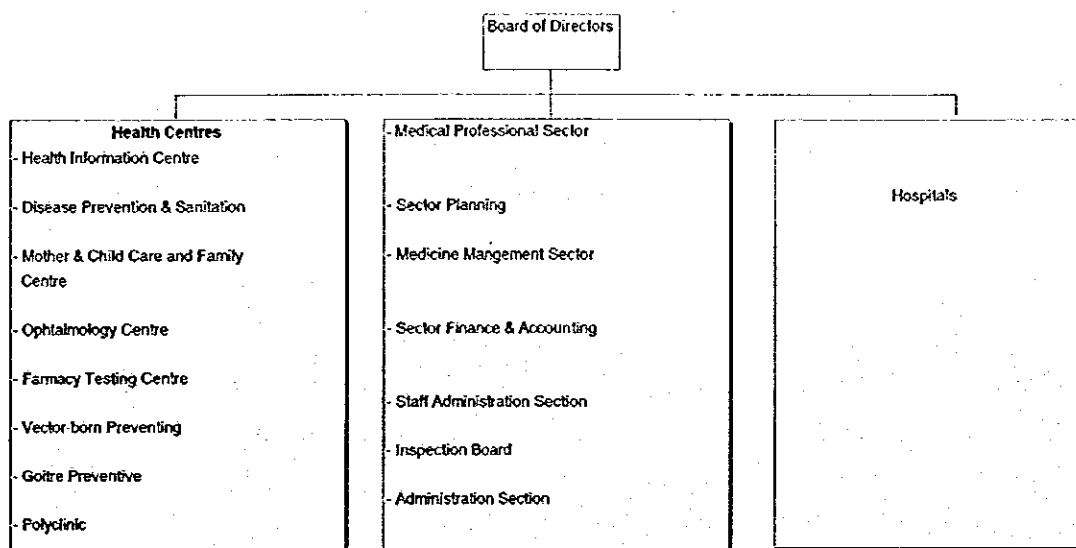
#### **Operation and Maintenance**

Training of O&M personnel is generally done as a part of the handing-over procedures and conducted by CERWASS. The training is done as on-the-job training over a period of 4 weeks. Main focus of the training is the technical aspect of operation and maintenance while financial issues and collection of water fees are delegated to CPC and Village Heads.

After handing-over, the facilities are to be managed by the CPC. One caretaker who gets assistance from CPC on fee collection and administration generally performs operation and

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5 Generally finances comes from 3 sources: UNICEF (material counting for 20% of the costs), provincial budgets which includes peoples contribution (60%), allocations from national budgets (20%).



maintenance. The caretaker performs general maintenance, while CERWASS or any other licensed company can do major repair. Spare parts can in most cases be obtained from the nearest town. CERWASS has no spare parts in stock.

#### **Department of Health (DOH)**

Department of Health takes care of preventive and curative health services through the operation of the primary health care system at local level. DOH reports to the Ministry of Health (MOH) at national level and PPC at province level.

The Law on Public Health (1989) governs its position, responsibilities and functions in the RWSS sector. In the water and sanitation sector the role of DOH is to provide health education, to promote proper water supply and sanitation practises, and to implement sanitation programmes in the rural areas.

In the RWSS sector the law assigns mainly regulatory functions and information and education campaigns (IEC) to DOH. However, it also allocates responsibilities to DOH for prevention of communicable diseases, which also includes RWSS.

DOH is the umbrella organisation covering all health activities at provincial and local level. DOH is also a member of the RWSS Management Board, which is chaired by the Chairman of the Provincial People's Committee.

The main functions of the DOH regarding RWSS are to:

- Provide standards and guidance to the public on all health issues related to safe water and environmental sanitation;
- Give standards and guidance to professional organisation engaged in building and operating water supply systems;
- Monitor and evaluate health issues related to public use of water supply facilities and sanitation.

Overall management and administration of the provincial health sector is done by the Director

assisted by 3 Vice-directors and 7 staff units (sectors) totalling 29 employees. An outline of DOH is presented below.

The most important institution related to RWSS is the Provincial Disease Prevention and Sanitation Centre (PDPSC) which has 30 professional staff (medical doctors and nurses).

### **PDPSC**

The PDPSC reports to the provincial Department of Health. Its key functions are regulatory related to the monitoring and enforcement of standards, although delivery of public services including IEC programmes are also included in its mandate. The main function of the PDPSC is:

- Provision of primary health care services;
- Control and monitoring of environmental sanitation;
- Monitoring of industrial and occupational health;
- Health monitoring in schools;
- Inspection of sanitary facilities in public works;
- Provision of malnutrition prevention programmes;
- Epidemiological monitoring of 23 communicable diseases;
- Vaccination programmes;
- Health education;
- Control and monitoring of epidemic diseases.

As available funding determines the activities of PDPSC, the National Environmental Sanitation Programme of UNICEF for controlling and testing of latrines and water quality is a core activity.

The PDPSC has comparatively large staff with qualified doctors, nurses, technicians, and laboratories and support staff. In Ninh Binh PDPSC includes 30 members of staff. The staff is headed by a director and organised in 5 main sections:

- Administration;
- Planning Section;
- Laboratory (provide testing of domestic water);
- Sanitary Faculty (provide training on health issues related to RWSS);
- Disease Prevention Faculty.

The PDPSC works through the Department of Health and the Commune Health Centres through delegation of responsibilities, issuing orders, monitoring performance according to set targets, and provide professional support including laboratory services.

The most important unit regarding RWSS is the **Sanitary Faculty** responsible for all aspects of public and environmental sanitation. The faculty has totally 15 professional medical staff and health workers responsible to the head of faculty. The faculty has four sections:

- Public Sanitation;
- Industrial Sanitation;
- Foodstuff Sanitation;
- Environmental Sanitation.

All sections are interacting and direct and support the District Health Centres (DCH) as well as Commune Health Centres (CHC) on the different aspects of RWSS. This includes:

- Provide guidelines and guidance on how to handle water to be safe and the importance of using (clean) latrines;
- Provide guidelines and guidance on how to dig wells and operate and maintain them in a proper manner;
- Monitor and evaluate the RWSS situation.

### **Operations**

These functions are generally done the following way:

Upon request from the Department of Health - which in turn is requested by the Commune Health Centres (CHC) - staff from the DHC laboratory collects water samples and other samples to establish the causes of any water diseases. If the tested water is found condemned, the polluting source must be detected by the of the CHC with technical support from DHC or the PDPSC.

In principle water from wells should be tested regularly - especially after flooding. In general water from wells should be tested every 3 months. In connection with piped water systems testing of water quality should be performed twice a week. If there are problems with the water quality PDPSC send a request to CERWASS through DARD on the matter and demand for proper action to be taken (treating of water etc.)

Division of responsibilities and co-ordination of work between the province and the district is done on monthly meetings. Based on the reports PDPSC prepare actions to be taken at district level. Except for vaccinations most planning is done on a monthly basis. When there is an outbreak of diseases caused by condemned water, PDPSC will ask the responsible authority to take actions.

IEC is generally performed the following way:

- Campaigns through mass-media;
- Use of mobile amplifiers (loudspeaker on cars);
- Each hamlet has a person responsible for propaganda.

PDPSC instruct the DHC, which then organise CHC to conduct the campaign. In general, campaigns are only conducted when there is an outbreak of disease. Most programmes on environmental sanitation are conducted with financial support from UNICEF. In those cases where there are no external finances provided, each level (province, district and commune) are responsible for financing their own part of any action (planned targets based on higher level projections) if it is not part of a national programme or campaign receiving targeted financial

resources.

It seems that the only form of co-operation between CERWASS and PDPSC is through the process of testing domestic water. The Department of Health and PDPSC have to a very limited extent been involved in water supply component of UNICEF's WATSAN programme. The main agent for this programme is CERWASS. At the same time very limited focus is put on environmental sanitation in connection with rural water supply project organised through CERWASS. In those cases where a more programmed approach to environmental sanitation is applied it seems that DOH is conducting these independently from the operations of CERWASS. Often DOH promotes its own water supply project (provides information and guidance on construction of well and rainwater collections systems (water jars). Targets are generally set annually based on national prospective plans (80% of the households shall have access to safe water).

Government campaigns to improve latrine conditions have been conducted through a pilot programme, which introduced clean latrine models in selected communes. The objective was that through experience, the commune people would copy the model and build one on their own. This programme has not been too successful. The reasons given were that the facilities were too costly if standard drawings and specifications were to be followed (between VND 1 - 2 mill.) people lost interest in the importance of sanitation and after some time. It is the impression of the consultant that limited resources were provided to the Commune Health Centre to follow-up on IEC activities as well as the construction of latrine facilities can be done much cheaper using only local materials and a simplified technology. Presently, no authority can enforce introduction of environmental sound latrines therefore IEC plays an important mechanism to facilitate the use of proper latrines.

Presently, PDPSCs are part of a educational network managed by the Ministry of Education (MOE) where PDPSCs provide guidance on health education. Arranging training courses for teacher on different health issues generally does this. The budget is provided by MOE and PDPSC is given a small allowance. In general, IEC budgets are very limited.

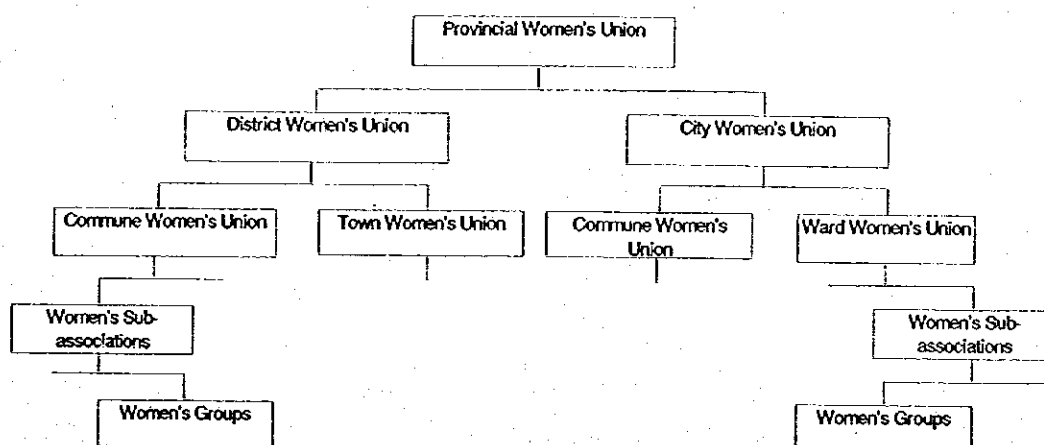
#### **Women's Union**

A meeting was conducted at the Ninh Binh Women's Union. Participants were the Chairwoman and the two Vice-chairwomen.

The objectives of Women's Union in connection with RWSS are to:

- Improve local communities awareness of proper environmental sanitation;
- The importance of using clean water and how water can be safe to drink;
- Help women to build clean sanitation facilities

The Women's Union is organised and work in a similar way to the other provincial departments e.g. through delegation and instruction of district and commune branches of the union. The main implementing unit is therefore at commune and village level. An outline of the organisation is presented below.



The Provincial Women's Union is divided 5 section totalling 20 staff plus 3 board of director.

- Administration (7 staff);
- Labour Arrangements (3 staff);
- Family Planning (6 staff);
- Propaganda and IEC (4 staff);

All provincial staff members have university degrees (BA in social science mostly) of which 2 are medical doctors responsible for RWSS issues.

According to the Director, the role of the medical doctors are of an advisory nature. Part of their time is used on reviewing new literature on RWSS issues, give advise to the Women's Union's board of managers as well as arrange and conduct training courses for union members from the different levels of the organisation.

There are 8 district in Ninh Binh with a total of 32 staff members. Generally, each office at district has an average of 4 staff. There are 142 or towns with 2 representatives in each. Commune/village level represents 1900 members - one representative in each. In addition there is a network of "counterpart" women at village level organised in sub-associations and women's groups. The units are used as mediators of implementation.

WU involvement in RWSS is done through:

- Regular village meetings with participation from the district or province to inform about RWSS programmes and campaigns;
- Organising clubs or task-forces;
- Initiate credit or saving unions so households can be able to build safe wells and latrine facilities;
- Conduct IEC campaigns and distribute information materials (often provided by UNICEF).

The Vietnam women's Union is the most active mass organisation in the RWSS sector. Its main involvement in the RWSS sector is through the implementation of UNICEF projects on wells and water tanks through community mobilisation.

Women's Union conducts annual courses in different community development subjects including RWSS. Training of trainers courses are held at province level whereby the training courses are replicated at district and commune level. Funds are provided through the provincial budget.

The aim is to facilitate the national goals on RWSS e.g. Each household should have:

- One clean well;
- One clean latrine;
- One clean bathroom.

Since 1993 UNICEF has been supporting WU with different IEC materials as well as project support. This includes a booklet ("Increasing Income and Communication") used as a textbook in connection with the training courses and credit/revolving funds to the poorest segments of the rural population. Booklets are also provided to the "Village Counterpart" as support to the conduct of IEC campaigns at household level (WU meetings are held monthly). The WU is also member of the Provincial and District RWSS Management Board.

### **Other Provincial Institutions Involved in RWSS**

#### **Department of Science, Technology and Environmental Protection**

The department has a very wide mandate with both regulatory and research functions. Its main activities in the RWSS sector is related to protection of water resources, and in particular industrial pollution and the misuse of pesticides in agriculture production. It has overlapping responsibility with the PDPSC to control water quality standards in order to perform environmental monitoring and control.

#### **Department of Planning (DPI)**

DPI is one of the most powerful institutions of the state administration at province level. It coordinates the inputs of the line ministry's sub departments in accordance with the Government's long-, medium-, and annual plans. Advises the Provincial People's Committee (PPC) on budgets for each sector, and exerts an indirect control over expenditures. In each line ministry's provincial departments there is a Planning Section which liaisons directly with DPI. The same occur at district level where DPI is represented by the District People's Committee Planning Section.

#### **Department of Finance (DOF)**

DOF is closely connected to DPI. Its main tasks include support and guidance to the PPC in the preparation of the annual budgets and assist in rafting the medium-, and long-term financial plans. It also participate in the drafting of the annual socio-economic plans and plans for capital investments.

When the different authorities implement their plans DOF provides support and guidance on how to reach targets and provide assistance on management of loans and debt payments. It

has the duty to control the finances of self-managed institutions as well as manage the auditing and accounting service for PCC. This includes participation in the evaluation of all project where foreign funds are involved.

### 2.3.3 District Level

#### District People's Committee

The District People's Committee (DPC) represents the executive branch of the district administration of which the Agriculture and Rural Development Section is the main responsible agency for rural infrastructure development. DPC is headed by the Chairman of the Peoples Committee and assisted by one ore several Vice-chairmen.

An outline of the different sections and staffing of 6Yen Mo District is used as an example for DPC organisation.

Section/Offices	Staffing
DPC Management Board	3
Agriculture & Rural Development	9
Transport & Construction	6
Culture	4
Education	8
Labour Arrangement	6
Land Management	4
Finance & Accounting	6
Inspection Board	3
Administration	4
<b>Total</b>	<b>55</b>

There is no District RWSS Management Board in the district but according to the Vice-chairman of the District People's Committee it will be established upon the initiation of the JICA project. Presently, the District People's Council discusses RWSS matter on its quarterly sessions.

Together with the District Health Centre the Agriculture & Rural Development Office is the main responsible organisation for RWSS at district level. This work is co-ordinated through

6 Yen Mo Distric People's Council has 29 members headed by the Chairman and Vice-chairman. The DPC sets the policy and directions of the DP Committee activities. DPC is elected for 5 year periods after which the DP Council selects the members of the DP Committee.



the District RWSS Management Board,<sup>7</sup> which have branches at in all the 31 communes of the district. The Chairman of the PPC heads the board and members are from district administration and district unions.

### **District Agriculture and Rural Development Office**

The meeting was held with the Chief of the District Agriculture and Rural Development Office (DARDO).

The main functions of the DARDO are related to:

- Support and improve agricultural production and thereby the income and living standard of the population;
- Organise and supervise co-operative systems according to national policies;
- Construct rural infrastructure necessary for agriculture production (roads, irrigation channels etc.)

The District Agriculture & Rural Development Office is headed by one Section Chief and divided into 2 units:

- Agriculture Production headed by one chief, 2 technicians and 1 clerk;
- Agriculture Hydrology headed by one chief, 2 technicians and 1 clerk.

The District Agriculture & Rural Development Office (DARDO) is to a very limited extent involved in domestic water for consumption as well as environmental sanitation, only for agriculture production and flood management. The District Health Centre and CERWASS take care of RWSS functions.

There are no piped water systems in the district and DARDO staff has limited experience in managing this kind of facilities. Main experience comes from involvement in from irrigation works.

Generally, all requests on support on water supply goes formally through DARDO which forwards a letter to DARD and CERWASS. DARDO has also the right to request private drilling companies with a licence to make wells upon approval from DARD and the Provincial Authority for Water Resources Management which is represented at district level by the Office of District Authority for Water Resources Management<sup>8</sup>.

The households pay all costs directly to CERWASS (or a contracted private drilling company) which in return provided drilling and materials for well construction and water

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<sup>7</sup> The board was established in Marts 1997.

<sup>8</sup> The co-operation between Office of District Authority for Water Resources Management (ODAWRM) and DARDO is restricted to provision of collected data. DARDO collect data on the need for water resources for agriculture production which is provided to ODAWRM which then make projections on water needs and calculates water costs for each co-operative (water is treated as an economic good).

pumping. The cost of well-drilling, hand pump and construction materials is generally VND 700.000 (CERWASS charge VND 30.000/drilled meter). The households have the possibility of selecting private drilling companies, but so far prefer CERWASS as they have most experience from the sector.

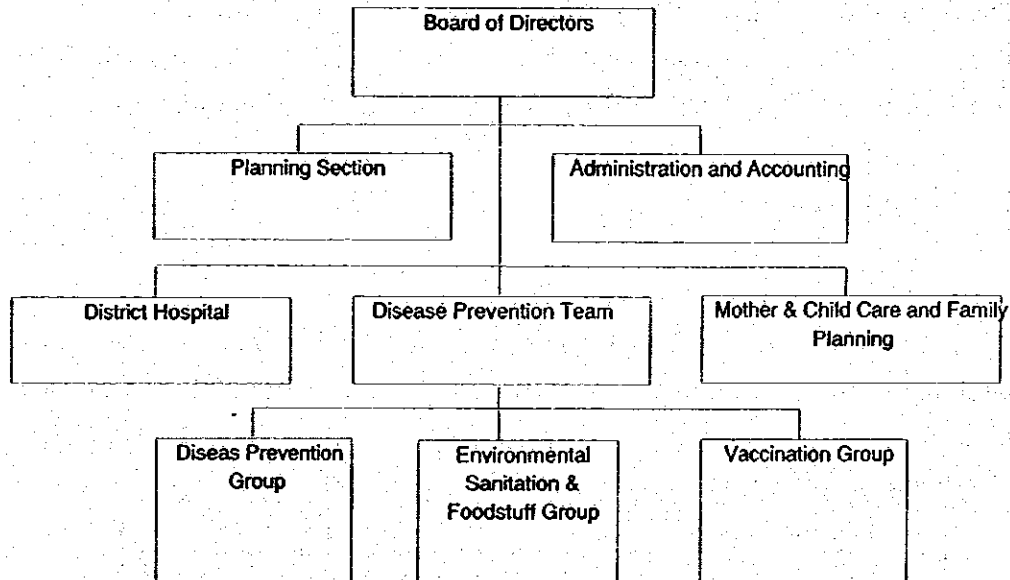
DARDO gives advise to households on construction of water tanks facilitated through DHC. No sanitation component is applied in connection with CERWASS involvement. This is left to the responsibility of the District Health Centres and the Commune Health Centres.

### District Health Centre

Yen Mo District Health Centre is used as an example regarding the role of District Health Centre (DHC) in RWSS. The meeting was held with the Director of DHC and members the People's Committee.

The DHC reports to the Provincial Department of Health on all professional matters but is also responsible to the District People's Committee on implementing specific district health policies.

A Board of Directors consisting of a Director and two Vice-directors heads the DHC. Totally there are 154 staff of which 30 are medical doctors. The organisation of DHC is outlined below.



The Disease Prevention & Sanitation Team is the main responsible unit for RWSS in the district. The DHC also manages a revolving funds set up under the WATSAN Programme (UNICEF) and undertakes promotion campaigns and training of selected community health workers and masons in connection with pilot project on clean latrines.

The Disease Prevention & Sanitation Team consists of 1 doctor who is team Leader and 6

nurses. The main functions of the team are:

- Manage vaccination campaigns;
- Introduce preventive action towards infection diseases;
- Facilitate awareness on environmental sanitation and promote construction of “clean latrines, clean wells, and clean bathrooms.
- Promote proper handling and storage of foodstuff.

The role of the Disease Prevention & Sanitation Team is to make guidance and training to CHC staff, provide information material, monitor and ensure that instructions are implemented. Some of these functions include among other things:

- Provide instructions on national campaigns like the “international environmental day”;
- Provide guidance on how to make proper latrines (technical design are provided to the communes via the CHC);
- Guidance on how to make and secure clean wells;
- Distribute IEC materials received from the province and direct any IEC campaigns instructed from the provincial level;
- Collect, assess and approve monthly reports on RWSS from the CHC;
- Compile data and produce statistics on RWSS issues;
- Conduct investigations on RWSS issues at commune level as required;
- Make reports to the District RWSS Management Board on RWSS issues.

About 75 % of the district households have access to clean water of Vietnamese national standards<sup>9</sup> (national target for 1998 is 80%). Only 14% have “clean toilets”.

### 2.3.4 Commune Level

#### Yen Thang Commune People’s Committee

A field visit was conducted to Yen Thang Commune. Meetings were held with the Chairman of Commune People’s Committee (CPC), Head of Administration Office CPC, and Chief of C.H.C.

The Commune People’s Committee has the following sections:

Section/Function	Staffing
Management Board (Chairman and Vice-chairman)	1
Military	1
Police & Security	1
Family Planning & Population	1

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<sup>9</sup> 50% have rainwater tanks.

Culture & Social Matters	1
Administration	1
Finance & Accounting	1
Land Property	1
Communication, Water Resources & Sanitation	1
<b>Total</b>	<b>9</b>

The Communication, Water Resources & Sanitation (CWRS) represent CPC in RWSS. Together with CHC CWRS implement policies directed from the local and higher level administrative units (district, province and national). CWRS has limited resources and is mostly occupied with administrating circulars and orders, which is passed on to CHC or other responsible local administrative unit.

Domestic water supply is mainly provided through household wells or common wells. CPC involvement in water supply is therefore very limited. Involvement is mostly restricted to protect water source from flooding during rain seasons and close wells if condemned. The CPC has also the responsibility to pass on any instructions on RWSS to the households. This is generally done through the local Unions and the Commune Health Centre.

#### **Yen Thang Commune Health Centre**

The meeting held with the Chief of the CHC plus members form the CPC including the Chairman of the Commune RWSS Management Committee.

The Commune Health Centre (CHC) is organised separately from the Commune People's Committee (CPC). CHC is reporting to the District Health Centre but is also responsible to the CPC who makes plans and implement decisions made by Commune People's Council and district authorities.

The CHC has 5 staff and 1 Chief of CHC. The Chief together with a nurse are responsible for prescription of medical drugs and medicine, one nurse is a birth maid, one is responsible for vaccination and one responsible for sanitation.

Generally, CHC shall perform the following:

- Conduct awareness campaigns together with Commune People's Committee members and village/hamlet chiefs;
- Promote use of clean latrines and how to produce safe water;
- Take regular water samples and dispatch them to DHC for testing.

Monthly reports are sent to DHC upon which meetings are held with DHC and CPC.

This CHC was relatively well equipped compared to many of the other CHC visited. Medical records are available including well counted for statistics. Several types of information materials were posted on inside the health centre relating to the different aspects of health

education. However, IEC resources are still limited. Out of 20 pilot latrines established in the commune during a national campaign initiated in 1993 only 7 more have been added by the community. Initially there had been a Latrine Management Construction Board responsible for the construction of the 20 pilot latrines in 1993, but when the national funding stopped the board was dissolved and the interest for "clean latrines" stopped. Presently campaigns are done in connection with, dinky fever prevention, and AIDS prevention but little attention is paid to environmental sanitation.

## 2.4 Than Hoa Province

### 2.4.1 Introduction

#### The Objectives of the Study Trip

A study trip to Thanh Hoa province was conducted on September 30 and October 1 1998 to assess organisational and human resources issues of the main stakeholders involved in RWSS at province and district level e.g.:

- The Provincial Department of Agriculture and Rural Development including Provincial CERWASS;
- The District Offices of Agriculture and Rural Development
- The Provincial Health Centre
- The District Health Centres
- Mass-organisation (Women's Union).

The main objectives were to:

1. clarify their role in RWSS and the responsible section or office dealing directly with RWSS;
2. organisation, staffing and resources provided towards RWSS;
3. links and co-operation with other organisations;
4. on-going programmes, projects or activities within the project area;
5. programming, planning and evaluation procedures for RWSS activities;
6. main problems as viewed by the stakeholders.

Based on the findings a profile of the RWSS sector will be outlined - from the national level down to commune level. The profile will not, however, include details of the target communes as this is done in connection with the commune survey.

The profile will be used when addressing the involvement of the different stakeholders in each phase of the projects cycle (planning, implementation, operation & maintenance (O&M), monitoring and evaluation) e.g. in order to sustain and further develop the RWSS facilities established through JICA assistance:

1. How are the O&M of RWSS facilities to be organised and conducted;
2. What roles are the different stakeholders to have to support O&M of RWSS facilities at commune/village level;
3. What kind of HRD support will be necessary to provide through the project at each level to sustain O&M of facilities.

Confronting the selected RWSS technology and its operational requirements with the capabilities and capacities of the target communes as well as other support organisations, a HRD programme can be outlined addressing the skills, know-how and attitude as well as

organisational issues necessary for sustainable O&M of RWSS facilities.

### Description of the Province

Thanh Hoa province lies about 150 km south of Hanoi and is one of the largest provinces of the country in terms of both natural area and population. Topographically the province is very diversified with mountainous and hilly landscape to the west along the Lao boarder and a narrow coastal plain to the east. The province covers an area of 11,000 km<sup>2</sup> with rich mineral potentials and abundant forestry and marine resources. The population is about 3,5 mill.

Thanh Hoa province is divided into 23 administrative units catering for the province capital Thanh Hoa City and two towns Bim Son and Sam Son. There are 20 districts.

### Target Area

The following districts and communes have been selected for the study.

District	Commune
Nong Cong	Nong Cong Town Van Thang
Thieu Hoa	Thie Hung Thieu Do
Yen Dinh	Dinh Tuong
Vin Loc	Vin Loc Town Vinh Thanh

Due to time constraints meetings with district representatives were conducted in Thanh Hoa town. However, to get some hands-on impression a field visit was conducted to Thie Hung commune as well as to the Thieu Hoa district institutions. Meetings with provincial authorities were held at CERWSS and other provincial department offices.

### Stakeholders Met

At province level meetings were held with:

- CERWASS;
- Provincial Department of Agriculture and Rural Development;
- Provincial Department of Health;
- Women's Union

During the district visit, meetings were held with the:

- Vice Chairman of the District Peoples Committee;
- The Chief of District Agriculture and Rural Development Office
- The Director of District Health Centre;
- Thie Hung Commune Health Centre;
- Representatives from Provincial, District and Commune People's Committees.

## **Provincial Level**

### **DARD**

Meetings were held with the Vice-Director of DARD and the Chief of the Administration Section.

### **Organisation**

DARD was established in 1996 through the integration of Department of Agriculture, Department of Hydrology, and Department of Forestry<sup>10</sup>. There are totally 11,050 staff employed within the 75 administrative and technical divisions under the umbrella of DARD:

- The DARD administrative itself contains of 10 sections with a total 68 staff headed by a Director and two Vice-directors.
- There are 17 different authorities dealing with different aspects of facilities management including Water & Hydrology Facility Management and Flood and Storm Protection & Dam Management. Total staffing is 622.
- The business enterprises cater for the largest division of DARD with 48 enterprises totalling 10,360 employees.

An outline of the organisation of DARD is presented overleaf.

There is 10 staff with a PhD in agricultural and engineering science. 1020 members of staff have university or college degrees. The remaining are undergraduates and skilled workers within different professions.

The main responsibilities and duties of DARD includes:

- Make recommendations to the Provincial People's Committee (PPC) on policies and decisions within the sector;
- Make recommendations to the PPC on strategies, long-, medium-, and short term plans for the sector. Develop strategies and master plans as well as provide guidance and co-ordination with other sector on implementation;
- Provide professional guidance on all productive issues within the sector;
- Make research and apply new sciences and technology to improve performance of the sector;;
- Monitor performance of the sector including quality, safety, and environmental issues related to agriculture production and flood and water resources management;
- Secure the functions of state management of the state companies in the sector;
- Perform state inspection and professional investigation as required including providing and managing licences;
- Provide veterinary services and safety of foodstuff production and use;

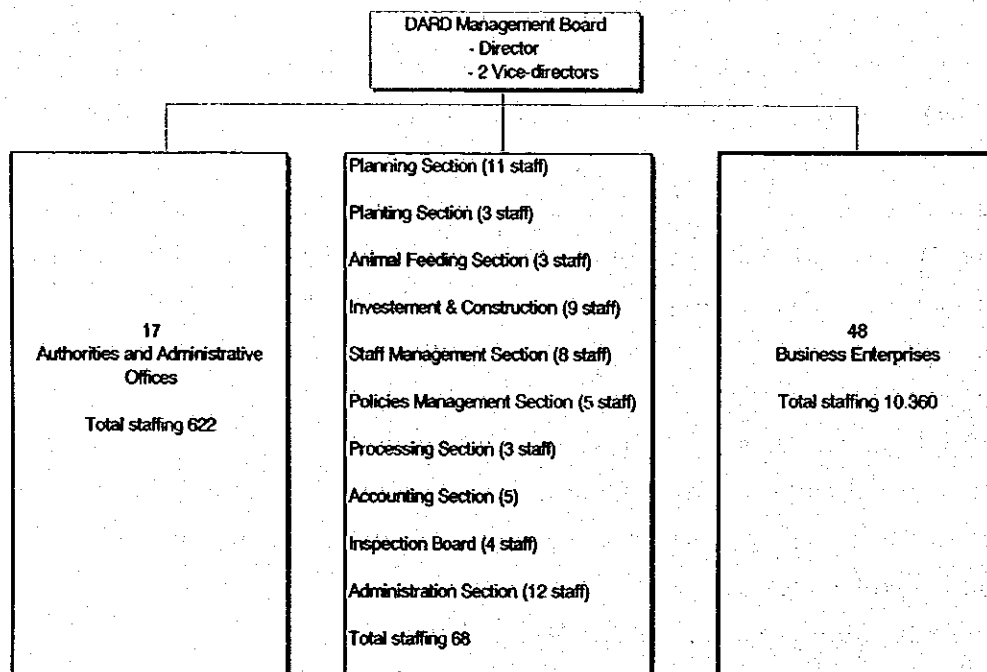
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<sup>10</sup> Based on Decision No.1362/TC/UBTH of July 13 1996 issued by Chairman of the Thanh Hoa Provincial People's Committee.



- Conduct all internal co-ordination within the sector;
- Build capacities and human resources within each sub-sector;
- Conduct flood protection and prevention of drought;
- Guide the allocation of human resources and the development of new economic areas/zones;
- Manage all state properties and human resources under the control of DARD.

### Outline of DARD Organisation



Official salary for government staff employees is VND 500.000/month. For government worker staff the salary is VND 300.000/month. There is no specified budget for human resource development in DARD although some training is provided through seminars, workshops and grants from international organisations etc.

#### Planning and Co-ordination of RWSS Activities

On January 5 1996 the PPC established a Management Board to deal with RWSS. The board is guided by the National RWSS Management Board but is responsible to the PPC.

The members of the board includes: DARD, Department of Science, Technology and Environment, Department of Health, Department of Planning and Investment, Department of Construction, Department of Finance. CERWASS is participating as an observer.

The main function of the board is to co-ordinate joint effort development within the RWSS sector. The board meets every quarter and review progress and challenges addressed on previous board meetings. Proposed actions on how to meet targets and challenges for the remaining planning period as well as addressing immediate actions so solve severe problems. Planning and co-ordination of RWSS activities are based on national targets and priorities as

well as local needs. This is evaluated and compared to the capacities and resources available at province and lower levels of administration. Annual plans are then made and adjusted according to the long- and medium plans of the RWSS sector. Information on local needs are provided from the Commune People's Committees which dispatch their plans and requests to the PPC through the priorities of the District PC. RWSS plans are then investigated and evaluated by CERWASS and other provincial institutions before projects are approved and forwarded to national level ministries for final approval. The plans are then reversed back to the province for final budget allocation and implementation by the responsible agency.

Presently there is no master plan for water resources development in the province the Authority does not map (ground water resources for Water and Hydrology Facilities). Plans for RWSS is therefore based on 2-year prospective planning and annual plans guided by the National Objective Programme and UNICEF programme. Before implementation of water supply projects the Authority provides license for Water and Hydrology Facilities.

The budget for RWSS is very limited, most financial resources comes from UNICEF and users with some additional funding from the provincial budget and national level. Capital sources are in general:

- MARD;
- UNICEF (on materials);
- Provincial budget;
- Peoples contribution

The main actors within the RWSS sector are CERWASS, Department of Health through the Provincial and District Medical Centres and Commune Health Centres. Women's Union is also involved to a great extent, especially within activities related to IEC campaigns and credit systems.

The main issues of DARD are agriculture production and water supply to domestic consumption and production. DARD's (and CERWASS) involvement in environmental sanitation is very limited. The Provincial Department of Health who is responsible deals this with for all health issues related to water supply and sanitation. Department of Science, Technology & Environment is responsible for the impact on the environment from sanitation and sets standards for pollution as well as gives discharge permissions. The Provincial Department of Health and Department of Science, Technology & Environment gives guidelines to CERWASS on RWSS project issues.

## **CERWASS**

### **Mandate and Main Objectives**

The centre was established in 1983 to work with UNIFEC and other international organisations in RWSS. In its initial phase CERWASS was only responsible for water supply but since 1995 when it was transferred from Minister of Labour, Invalids and Social Affairs (MOLISA) to MARD it has (in principle) also been responsible for environmental sanitation.

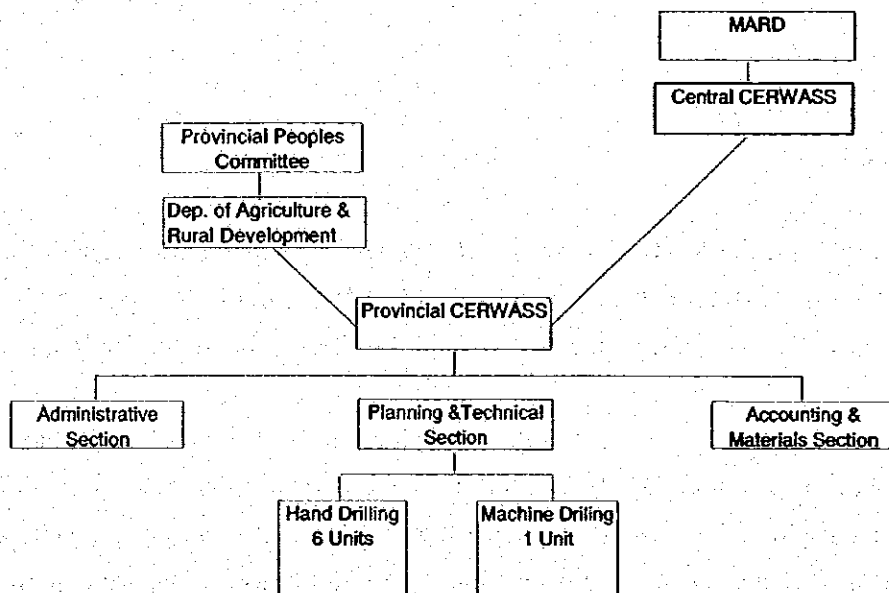
The main objectives of the centre are to:

1. Evaluate present water supply systems;
2. Assist the province in planning (short, medium and long-term) water supply;
3. Organise and implement projects;
4. Share domestic finances to execute work;
5. Implement water supply projects supported by UNICEF;
6. Authorised to make proposals supported by domestic organisations and international donor agencies;
7. Carry out campaigns on environmental management and protection - train staff to do this;
8. Construct pilot projects on RWSS

All communication goes through DARD, which instructs CERWASS on selection and implementation of RWSS project

### Organisation, Functions an Staffing

The present organisation of Thanh Hoa CERWASS is outlined below.



The centre is headed by Director Nguyen Van Cuong and supported by a Vice-director which together constitutes the Management Board. Total staff is 58 of 8 which have university degrees (BSc or BA). The technical specialists includes:

- 1 engineer hydrology
- 1 geo-physics (BSc)
- 1 engineer geology
- 1 prospecting engineer (surveyor?)
- 1 drilling engineer

- 1 economist (university degree BA?)
- 1 machine engineer
- 1 construction engineer

There have been three major changes in the staffing pattern. From 1983 - 87 staffing included 18 employees. From 1987 until 1992 staffing increased to 80 due to more intensive implementation of UNICEF RWSS project coupled with only hand drilling equipment. In 1992 machine-drilling equipment was introduced resulting in a reduction of manpower to present number (56).

An outline of the staffing pattern is presented overleaf.

Category	Mgt. Board	Adm.	Technical	Planning	Accounting	Hand Drilling	Machine Drilling
Univ. grad	2		4	1	1		
Technicians		3	4	2	3		
Workers		1	1			30	7
<b>Total = 56</b>	<b>2</b>	<b>4</b>	<b>8</b>	<b>3</b>	<b>4</b>	<b>30</b>	<b>7</b>

**Administration Section** consists of 4 staff. The chief of section has college degree in administration and with specific responsibility for labour management. There are 2 office clerks in charge of recording, filing and typing plus miscellaneous office work. 2 drivers are attached to the section.

**The Planning and Technical Sections** are working more or less as one section and are divided into three working groups:

- Group 1 consists of 4 staff (2 engineers and 2 college graduates) engaged in annual planning and conducting feasibility studies.
- Group 2 consists of 3 staff (1 engineer and 2 college graduates) engaged in supervision and monitoring construction of RWSS facilities.
- Group 3 consists of 1 hydrological engineer in charge of construction of well assisted by UNICEF.

Support staff includes one truck driver.

**Accounting and Materials Section** consists of 1 section chief (college degree in economics), 1 accountant (college degree), 1 engineer in charge of construction materials (UNICEF projects), 1 cashier/stock-keeper (college degree)

#### **Planning and Project Implementation**

The workload of CERWASS is foremost depending on funding available from UNICEF or other contributing agencies, local contribution and needs as well as provincial and government funds. The following steps are applied in connection with the project cycle:

1. DARD and Central CERWASS provides guiding annual targets to be used as a yardstick;
2. Requests on RWSS are collected from the communes in two ways:
  - a) the CPP send a request to the District Agriculture and Rural Development Office (DARDO) who forwards the request to DARD which then is dispatched to CERWASS. CERWASS initiates a pre-feasibility study on the water conditions local as well as do a socio-economic screening (willingness to contribute financially to the project). A letter

is then sent to DARD and Central CERWASS (and UNICEF) with remarks on to proceed or not. If the pre-feasible study is approved by Central CERWASS the are included as one of the targets for RWSS projects and a letter is sent to MARD for acceptance. The reply/approval (only technically not financially) is then reversed in the same manner back to PPC, DARD, CERWASS, DPC, CPC and finally the village.

- b) The same process as a) but initiated by CERWASS, which approach the commune on their own initiative.
3. If funding is provided from UNICEF or some other source and approved by Central CERWASS, MARD, PPC, and DARD Provincial CERWASS initiate the feasibility study and collects all data necessary for making a draft design project.
4. After approval of PPC draft technical specification and preliminary cost estimates/budget are then dispatched to DARD, PPC, Department of Planning and Investment, Central CERWASS and MARD (including UNICEF) for final approval and returned back to the same institutions at local level.
5. If financial arrangements from national and provincial government as well as community contribution can be arranged and approved by PPC detailed design is then completed. If CERWASS has the capacity they can make the design. If not this is done by Department of Construction and a cost-pay-basis or Central CERWASS can give technical support to Provincial CERWASS (also on cost-pay-basis). Provincial CERWASS proceeds with contract arrangements with local community (and collection of initial instalments?)
6. After completion of design the project goes on open tendering if the budget is over VND 500.000.000. If the amount is less CERWASS can selected a contractor to construct the facilities under supervision of Provincial CERWASS.
7. Training of RWSS operator and handing over procedures.

Since 1997 RWSS 4 projects have been completed/approved out of 14 applied for. Out of 8 projects applied for in 1997 2 were completed in 1997. In 1998 2 new projects were approved and completed while 4 new projects are being applied for on the 1999 budget.

Provincial CERWASS can only make work-programmes on an annual basis as projects are only approved on a year to year basis. Planning is very project biased, and no medium- and long term priority plans are made (master planning).

The planning period for a project is generally 3 man/months on a part-time basis where each sections have different tasks to perform. In 1998 only 2 projects were planned and implemented. Administration and supervision of implementation are calculated to 1 to 2 man/months, training and handing over 1 man/month. Total time for one project can then be stipulated to 6 man/month. For 1998 total project input was 12 man/months. In addition consultancy is performed for other agencies and the private sector including test-drilling and well drilling. Taken into account pre-investigation and the conduct of pre-feasibility studies, it is still the consultants opinion that Provincial CERWASS has sufficient capacity to take on

more RWSS projects - only professional technical planning expertise counts for close to 170 man/months/year support functions not included. Drilling capacity is close to 370 man/month/year.

### **Operation and Maintenance (O&M)**

The main workload of CERWASS comes from its involvement in the implementation of UNICEF's WATSAN Programme. So far 10,000 shallow wells established for households. 90% are functioning well, 4% do not work due to wrong construction, and 6% due to bad water quality.

The main activities related to O&M which are initiated or performed by CERWASS are:

- Training of selected local people to O&M the facilities;
- Distribute manuals/booklets guiding O&M;
- Supply materials and spare parts (generally this can be purchased in the nearest town) or establish material shop where spare parts can be purchased;
- In connection with gravity WS systems a professional O&M group are established;

Financing O&M is based on payment according to consumption - "it is the people's facility so they have to pay themselves".

It is also a principle that the technology applied should be adjusted and fitted to local level skills. Local craftsmen shall therefore do maintenance and minor repairs. More complicated issues by CERWASS or another professional organisation (the communes are free to select any provider as long as they are registered and certified. So far Vietnamese products have been used in the majority of RWSS schemes and there is no problem in getting hold of spare parts that fit to Vietnamese standards.

Totally 30 centralised water supply (WS) systems are in place of which 10 use groundwater. The rest from springs. Oldest system in Can Thoy Town Commune from 1988 but this facility system does not work due to bad water quality or bad maintenance. Worked well for 5 years after CERWASS and Town Committee established O&M group. However, after a new Chairman of the Peoples Committee was elected proper O&M failed to work.

DARD is responsible for monitoring the work of CERWASS. According to DARD more emphasis must be put on improving local capacity as well as the professional skills of management organisations (CERWASS). However, limited resources are available for post-graduate training of professionals, most enhancement of skills and knowledge come from on-the-job experience.

### **Department of Health (DOH)**

Department of Health takes care of preventive and curative health services through the operation of the primary health care system at local level. DOH reports to the Ministry of Health (MOH) at national level and PPC at province level.

The Law on Public Health (1989) governs its position, responsibilities and functions in the

RWSS sector. In the water and sanitation sector the role of DOH is to provide health education, to promote proper water supply and sanitation practises, and to implement sanitation programmes in the rural areas.

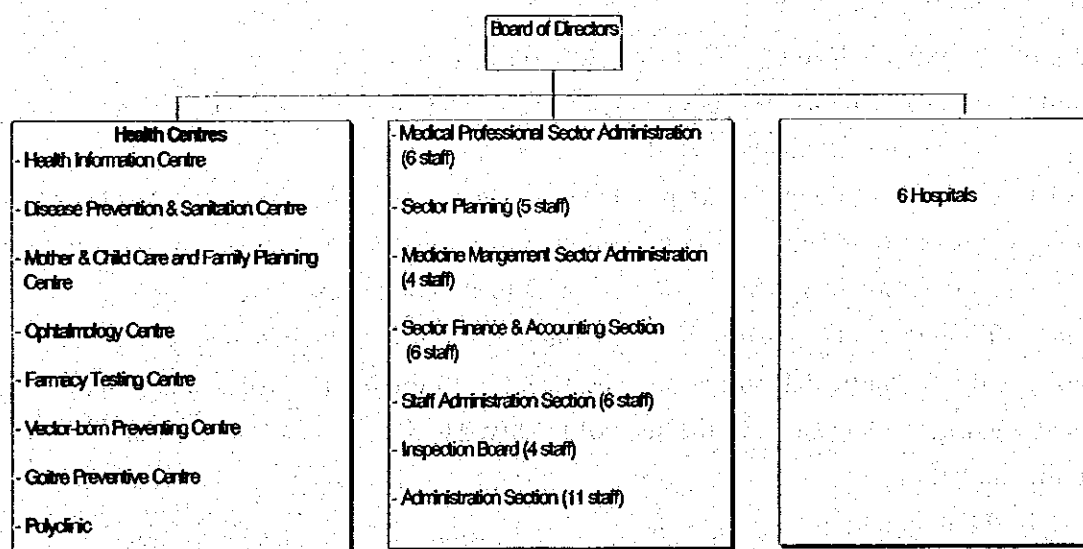
In the RWSS sector the law assigns mainly regulatory functions and information and education campaigns (IEC) to DOH. However, it also allocates responsibilities to DOH for prevention of communicable diseases which also includes RWSS.

DOH is the umbrella organisation covering all health activities at provincial and local level. DOH is also a member of the RWSS Management Board which is chaired by the Chairman of the Provincial People's Committee.

The main functions of the DOH regarding RWSS are to:

- Provide standards and guidance to the public on all health issues related to safe water and environmental sanitation;
- Give standards and guidance to professional organisation engaged in building and operating water supply systems;
- Monitor and evaluate health issues related to public use of water supply facilities and sanitation.

In Thanh Hoa DOH is responsible for 6 hospitals and 8 health centres. Overall management and administration is done by the Director assisted by 3 Vice-directors and 7 staff units (sectors) totalling 41 employees. An outline of DOH is presented below.



The most important institution related to RWSS is the Provincial Disease Prevention and Sanitation Centre (PDPSC).

#### **PDPSC**

The PDPSC reports to the provincial Department of Health. Its key functions are regulatory related to the monitoring and enforcement of standards, although delivery of public services



including IEC programmes are also included in its mandate. The main function of the PDPSC is:

- Provision of primary health care services;
- Control and monitoring of environmental sanitation;
- Monitoring of industrial and occupational health;
- Health monitoring in schools;
- Inspection of sanitary facilities in public works;
- Provision of malnutrition prevention programmes;
- Epidemiological monitoring of 23 communicable diseases;
- Vaccination programmes;
- Health education;
- Control and monitoring of epidemic diseases.

As available funding determines the activities of PDPSC, the National Environmental Sanitation Programme of UNICEF for controlling and testing of latrines and water quality is a core activity.

The PDPSC has comparatively large staff with qualified doctors, nurses, technicians, and laboratories and support staff. In Thanh Hoa PDPSC includes 56 members of staff. The staff is headed by a director and organised in 5 main sections:

- Administration (7 staff);
- Planning Section (4 staff);
- Laboratory (provide testing of domestic water) (10 staff).
- Sanitary Faculty (provide training on health issues related to RWSS) (15 staff);
- Disease Prevention Faculty (12 staff);

The PDPSC works through the Department of Health and the Commune Health Centres through delegation of responsibilities, issuing orders, monitoring performance according to set targets, and provide professional support including laboratory services.

The most important unit regarding RWSS is the **Sanitary Faculty** responsible for all aspects of public and environmental sanitation. The faculty has totally 15 professional medical staff and health workers responsible to the head of faculty. The faculty has four sections:

- Public Sanitation;
- Industrial Sanitation;
- Foodstuff Sanitation;
- Environmental Sanitation.

All sections are interacting and directs and support the District Health Centres (DCH) as well as Commune Health Centres (CHC) on the different aspects of RWSS. This includes:

- Provide guidelines and guidance on how to handle water to be safe and the importance of using (clean) latrines;
- Provide guidelines and guidance on how to dig wells and operate and maintain them in a

proper manner;

- Monitor and evaluate the RWSS situation.

These functions are generally done the following way:

Upon request from the Department of Health - which in turn is requested by the Commune Health Centres (CHC) - staff from the DHC laboratory collects water samples and other samples to establish the causes of any water diseases. If the tested water is found condemned, the polluting source must be detected by the CHC with technical support from DHC or the PDPSC.

In principle water from wells should be tested regularly - especially after flooding. In general water from wells should be tested every 3 months. In connection with piped water systems testing of water quality should be performed twice a week. If there are problems with the water quality PDPSC send a request to CERWASS through DARD on the matter and demand for proper action to be taken (treating of water etc.)

Division of responsibilities and co-ordination of work between the province and the district is done on monthly meetings (every 10<sup>th</sup> day of the month). Based on the reports PDPSC prepare actions to be taken at district level. Except for UNICEF programmes and vaccinations most planning is done on a monthly basis. When there is an outbreak of diseases caused by contemned water, PDPSC will ask the responsible authority to take actions.

IEC is generally performed the following way:

- Campaigns through mass-media;
- Use of mobile amplifiers (loudspeaker on cars);
- Each hamlet has a person responsible for propaganda.

PDPSC instruct the DHC, which then organise CHC to conduct the campaign. In general, campaigns are only conducted when there is an outbreak of disease. Most programmes on environmental sanitation are conducted with financial support from UNICEF. In those case were there are no external finances provided, each level (province, district and commune) are responsible for financing their own part of any action (planned targets based on higher lever projections) if it is not part of a national programme or campaign receiving targeted financial resources.

Government campaigns to improve latrine conditions have bee conducted through a pilot programme, which introduced clean latrine models in selected communes. The objective was that through experience, the commune people would copy the model and build one on their own. This programme has not been to successful.

It seems that the only form of co-operation between CERWASS and PDPSC is through the process of testing domestic water. PDPSCs are part of a educational network managed by the Ministry of Education (MOE) where PDPSCs provide guidance on health education. Arranging training courses for teacher on different health issues generally does this. The budget is provided by MOE and PDPSC is given a small allowance. In general, IEC budgets

are very limited.

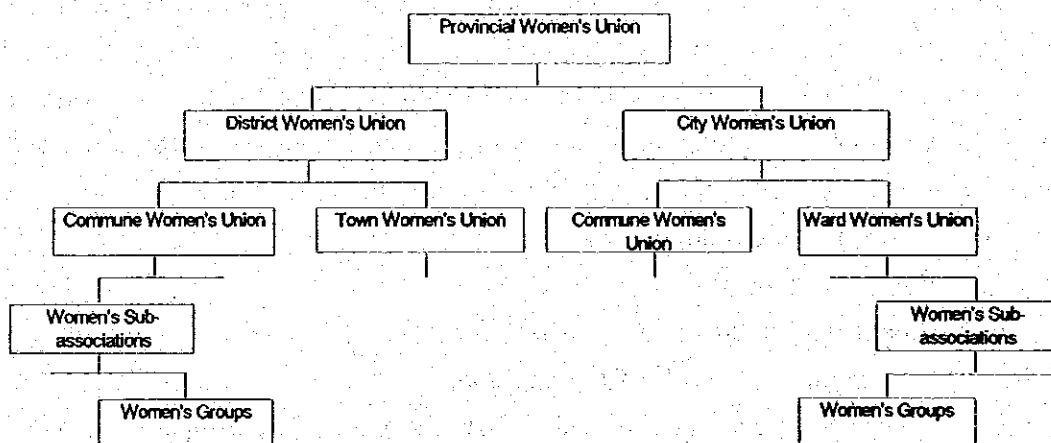
### Women's Union

A meeting was conducted at the Thanh Hoa Women's Union. Participants were the Chairwoman and the two Vice-chairwomen.

The objectives of Women's Union in connection with RWSS are to:

- Improve local communities awareness of proper environmental sanitation;
- The importance of using clean water and how water can be safe to drink;
- Help women to build clean sanitation facilities

The Women's Union is organised and works in a similar way to the other provincial departments e.g. through delegation and instruction of district and commune branches of the union. The main implementing unit is therefore at commune and village level. An outline of the organisation is presented below.



The Provincial Women's Union is divided 5 section totalling 26 staff plus 3 board of director:

- Administration (11 staff);
- Human Resources (4 staff);
- Family Relations (5 staff);
- Propaganda and IEC (3 staff);
- Project Management (3 staff)

Each office at district has an average of 4 staff, commune level or towns have 2 and in each village there is one representative. In addition there is a network of "counterpart" women at village level organised in sub-associations and women's groups. The units are used as mediators of implementation. In Thanh Hoa there are 27 District Women's Unions with a total staff of 130. City and commune levels have 1254 staff members.

WU involvement in RWSS is done through:

- Regular village meetings with participation from the district or province to inform about

RWSS programmes and campaigns;

- Organising clubs or task-forces;
- Initiate credit or saving unions so households can be able to build safe wells and latrine facilities;
- Conduct IEC campaigns and distribute information materials (often provided by UNICEF).

The Vietnam Women's Union is the most active mass organisation in the RWSS sector. Its main involvement in the RWSS sector is through the implementation of UNICEF projects on community mobilisation. In Thanh Hoa the WU has distributed a RWSS booklet to the village counterparts as a guidance to perform IEC campaigns. The aim is to facilitate the national goals on RWSS e.g. each household should have:

- One clean well;
- One clean latrine;
- One clean bathroom.

The financial resources to support this on a national basis is very limited, however, WU are able to contribute some resources to the poorest communities as well as direct UNICEF resources to the most needed commune. WU is a member of the Provincial RWSS Management Board.

### **Other Provincial Institutions Involved in RWSS**

#### **Department of Science, Technology and Environmental Protection**

The department has a very wide mandate with both regulatory and research functions. Its main activities in the RWSS sector is related to protection of water resources, and in particular industrial pollution and the misuse of pesticides in agriculture production. It has overlapping responsibility with the PDPSC to control water quality standards in order to perform environmental monitoring and control.

#### **Department of Planning (DPI)**

DPI is one of the most powerful institutions of the state administration at province level. It coordinates the inputs of the line ministry's sub departments in accordance with the Government' long-, medium-, and annual plans. Advises the Provincial People's Committee (PPC) on budgets for each sector, and exerts an indirect control over expenditures. In each line ministry's provincial departments there is a Planning Section which liaisons directly with DPI. The same occur at district level where DPI is represented by the District People's Committee Planning Section.

#### **Department of Finance (DOF)**

DOF is closely connected to DPI. Its main tasks include support and guidance to the PPC in the preparation of the annual budgets and assist in rafting the medium-, and long-term financial plans. It also participate in the drafting of the annual socio-economic plans and plans

for capital investments.

When the different authorities implement their plans DOF provides support and guidance on how to reach targets and provide assistance on management of loans and debt payments. It has the duty to control the finances of self-managed institutions as well as manage the auditing and accounting service for PCC. This includes participation in the evaluation of all project where foreign funds are involved.

## 2.4.2 District Level

### District People's Committee

The District People's Committee (DPC) represents the executive branch of the district administration of which the Agriculture and Rural Development Section is the main responsible agency for rural development. DPC is headed by the Chairman of the Peoples Committee and assisted by one ore several Vice-chairmen.

An outline of the different sections and staffing of Thieu Hoa District is used as an example for DPC organisation. The district was established January 1997. Before this time it was part of Thieu Dong Ho District, which was divided into 3 districts.

Section/Offices	Staffing
DPC Management Board	3
Agriculture & Rural Development	6
Planning & Investment	5
Transport & Construction	5
Culture	5
Education	16
Labour Arrangement	7
Land Management	3
Finance & Accounting	7
Inspection Board	5
Mass-media	4
Administration	17
<b>Total</b>	<b>83</b>

Together with the District Health Centre the Agriculture & Rural Development Office is the main responsible organisation for RWSS at district level. This work is co-ordinated through the District RWSS Management Board,<sup>11</sup> which have branches at in all the 31 communes of

<sup>11</sup> The board was established in Marts 1997.

the district. The Chairman of the PPC heads the board and members are from district administration and district unions.

#### **District Agriculture and Rural Development Office**

The meeting was held with the Chief of the District Agriculture and Rural Development Office (DARDO).

The main functions of the DARDO are related to:

- Support and improve agricultural production and thereby the income and living standard of the population;
- Organise and supervise co-operative systems according to national policies;
- Construct rural infrastructure necessary for agriculture production (roads, irrigation channels etc.)

The District Agriculture & Rural Development Office is divided into 4 sections. Total staff is 6 employees of which 1 is head of division assisted by a vice-head. The other staff has backgrounds in agricultural engineering.

- **Agriculture** 1 staff dealing with: Crop production;
- **Animal Husbandry** 1 staff dealing with animal feeding and production.
- **Co-operatives Management** 1 staff dealing with control of co-operatives
- **Water Resources** 1 staff dealing with: water flood management.

The District Agriculture & Rural Development Office (DARDO) is to a very limited extent involved in domestic water for consumption as well as environmental sanitation, only for agriculture production and flood management. The District Health Centre and CERWASS take care of RWSS functions.

There are 49,000 households in the district of which no one have piped water only wells with hand pumps. Close to 600 have been established with the assistance of UNICEF since 1995 and still on going. The cost of a well is about VND 1 mill. Of which households until 1996 contribute 60% of the costs. Since then all costs have to be covered by the households themselves.

The water supply facilities established through UNICEF assistance is provided by Thanh Hoa CERWASS who conduct surveys and well drilling and manage the different stages of the project cycle until wells as completed with hand pumps. The involvement of DARDO is very limited. Generally, all requests on support on water supply goes formally through DARDO which forwards a letter to DARD and CERWASS. DARDO has also the right to request private drilling companies with a licence to make wells upon approval from DARD and the Provincial Authority for Water Resources Management which is represented at district level by the Office of District Authority for Water Resources Management<sup>12</sup>.

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<sup>12</sup> The co-operation between Office of District Authority for Water Resources Management (ODAWRM) and DARDO is restricted to provision of collected data. DARDO collect data on

The households pay all costs directly to CERWASS (or a contracted private drilling company) which in return proved drilling and materials for well construction and water pumping. No sanitation component is applied in connection with CERWASS involvement. This is left to the responsibility of the District Health Centres and the Commune Health Centres.

About 40% of the district households have access to clean water of Vietnamese national standards while the target for 1998 is 80%.

There are no piped water systems in the district and DARDO staff has limited experience in managing this kind of facilities. Main experience comes from involvement in from irrigation works.

### **District Health Centre**

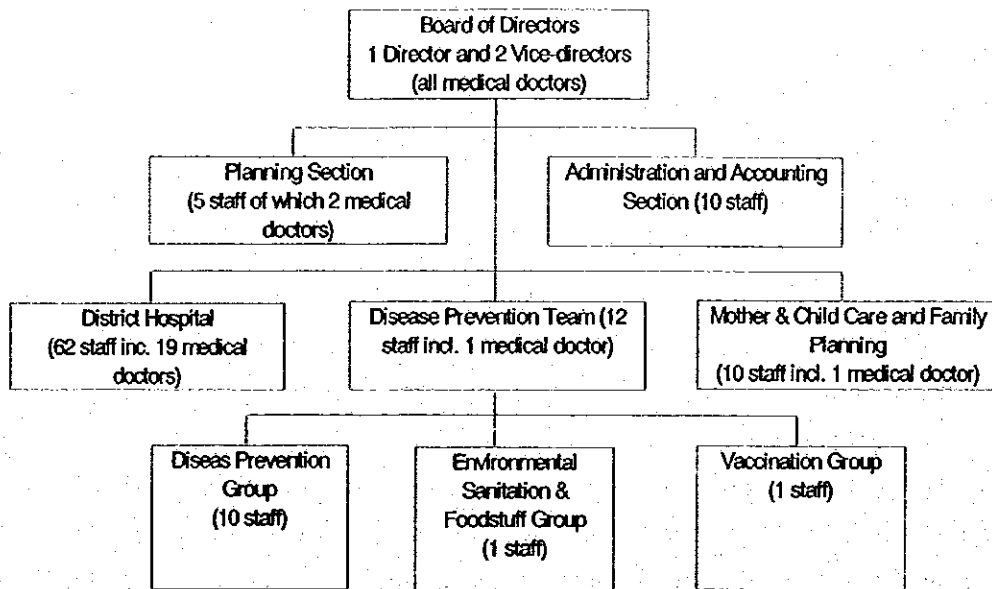
Thieu Hoa District Health Centre is used as an example regarding the role of District Health Centre (DHC) in RWSS. The meeting was held with the Director of DHC and members the People's Committee.

The DHC reports to the Provincial Department of Health on all professional matters but is also responsible to the District People's Committee on implementing specific district health policies.

A Board of Directors consisting of a Director and two Vice-directors heads the DHC. Totally there are 102 staff of which 26 are medical doctors. The organisation of DHC is outlined below.

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the need for water resources for agriculture production which is provided to ODAWRM which then make projections on water needs and calculates water costs for each co-operative (water is treated as an economic good).



The Disease Prevention & Sanitation Team is the main responsible unit for RWSS in the district. The DHC also manages a revolving funds set up under the WATSAN Programme (UNICEF) and undertakes promotion campaigns and training of selected community health workers and masons in connection with pilot project on clean latrines.

The Disease Prevention & Sanitation Team consists of 1 doctor who is team Leader and 11 nurses. The main functions of the team are:

- Manage vaccination campaigns;
- Introduce preventive action towards infection diseases;
- Facilitate awareness on environmental sanitation and promote construction of “clean latrines, clean wells, and clean bathrooms.
- Promote proper handling and storage of foodstuff.

One staff has the main responsibility for co-ordinating health issues related to the RWSS sector. This is mainly done through the Commune Health Centres (CHC) where DHC send instruction on specific actions to take. The role of the Disease Prevention & Sanitation Team is to make guidance and training to CHC staff, provide information material, monitor and ensure that instructions are implemented. Some of these functions include among other things:

- Provide instructions on national campaigns like the “international environmental day”;
- Provide guidance on how to make proper latrines (technical design are provided to the communes via the CHC);
- Guidance on how to make and secure clean wells;
- Distribute IEC materials received from the province and direct any IEC campaigns instructed from the provincial level;
- Collect, assess and approve monthly reports on RWSS from the CHC;



- Compile data and produce statistics on RWSS issues;
- Conduct investigations on RWSS issues at commune level as required;
- Make reports to the District RWSS Management Board on RWSS issues.

### 2.4.3 Commune Level

A field visit was conducted to Thic Hung commune. Meetings were held with the Chief of Commune People's Committee (CPC), Head of Administration Office CPC, and Chief of C.H.C. all members of the Commune RWSS Management Committee.

#### **Commune RWSS Management Board**

The RWSS Management Board was established in 1995 following instructions from the district administration. Board members includes Representatives from the Commune Peoples Committee (the Chairman of CPC is the Board Chairman); Commune Health Centre; police/security; all the local unions; representatives of schools; and the Land Management Office. Total members are 10 representatives.

The functions of the board are to:

- Co-ordinate all RWSS activities;
- Promote the use of proper WSSS facilities through IEC campaigns;
- Outline action plans and forward this to CPC and the council;
- Upon approval of action plan, monitor and evaluate activities on the use and improvement/construction of RWSS facilities;
- On the occurrence of any immediate crises of health risks related to RWSS propose actions to be taken by the CPC.

The board meet once a month to review the RWSS situation and outline actions to be taken before the next meeting. At the annual meeting the board outline the actions to be taken the following year supported by target figures on RWSS facilities. This years plan was not available on the consultant's request has the only copy (!) was dispatched to the district administration to be compiled with district data.

The board members do not receive any meeting allowances or compensation for attending the board.

#### **Commune Rubbish Collection Team**

The Commune Rubbish Collection Team (CRCT) is used as an example of local initiate on commune mobilisation and organisation. After a period of try and errors coupled with IEC and environmental awareness campaigns the CPC was able to establish a team collecting domestic waste each day based on user payment. The success of the arrangement is confirmed through the 90% overage of households.

According to CPC the fees collected (VND 4000/month/household) are sufficient to pay 8

workers and at the same time provide a small surplus for renewing collecting equipment. Collection of fees is organised by the Village Chiefs who hands the collected amount over to CPC treasures who then pay the collection team. Monthly salary for the collector is VND 250.000. Equipment was initially provided by the CPC. Renewal of equipment and protecting clothing are provided through the small surplus accumulated each month. This project indicates that with proper IEC and local commitment organisation of consumer based services are feasible.

### **Thie Hung Commune Health Centre**

The meeting held with the Chief of the CHC plus members form the CPC including the Chairman of the Commune RWSS Management Committee.

The Commune Health Centre (CHC) is organised separately from the Commune People's Committee (CPC). CHC is reporting to the District Health Centre but is also responsible to the CPC who makes plans and implement decisions made by Commune People's Council and district authorities.

The CHC has 3 staff and 1 Chief of CHC. The Chief is responsible for prescription of medical drugs and medicine, 2 nurses are birth maids and the third is responsible for vaccination. All staff members have relatively long-term experience from their work in the health sector. The Chief has a BSc in medical science ("practical doctor") equal to 5 years university study compared to nurses having 3 years of training.

General preventive health care is done by all including propaganda on safe water and environmental sanitation. More intensive campaigns are performed upon instructions from the district authorities or the CPC.

Generally, CHC shall perform the following:

- Conduct awareness campaigns together with Commune People's Committee members and village/hamlet chiefs;
- Promote use of clean latrines and how to produce safe water;
- Take regular water samples and dispatch them to DHC for testing.

Monthly reports are sent to DHC upon which meetings are held with DHC and CPC.

No extra funds are provided to perform IEC campaigns. In some cases information material from UNICEF are used. Information campaigns are also conducted by using mass-media communication facilities (each village has a loudspeaker mounted). The CHC is also using Village Health Counterparts, which gets instructions to inform the households on different health issues.

Only 5% of the households have drilled wells the remaining are using hand-dug wells. Focus is very much on waterborne diseases and safe drinking water, but little attention is given toward environmental sanitation except in connection with national campaigns. IEC is performed through mass-media communication facilities (each village has one loudspeaker

mounted). The Chief of CHC is a member of the RWSS Management Board.

It is the impression of the consultant that each sector organisation works very vertically with very little co-ordination between sectors. However, the RWSS Management Committee is a good initiative in the right direction.