

INTENSIVE SANITATION PROJECT QUYNH PHU DISTRICT, THAI BINH PROVINCE

WATSAN

NATIONAL REFERENCE CENTRE
WATER SUPPLY AND

(Hanoi, Vietnam)

PROJECT REPORT

Ministry of Health

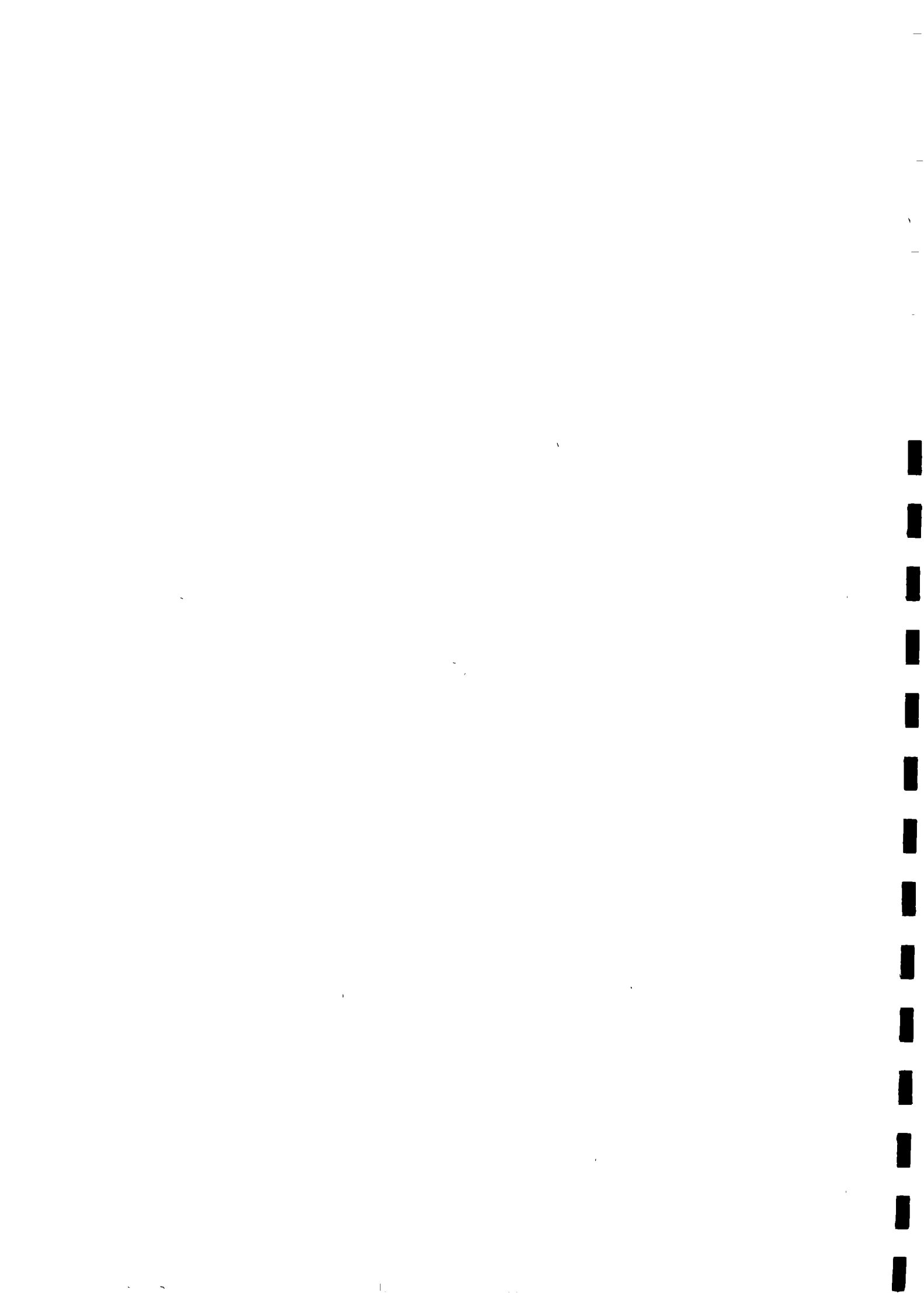
Socialist Republic of Viet Nam

National Environmental Sanitation Programme

Supported by: UNICEF, VIET NAM

Prepared by: WATSAN REFERENCE CENTRE
THAI BINH MEDICAL COLLEGE
(on behalf of MOH)

Implementing agency: District and commune Women's Unions
Quynh Phu District
Project Management Board, MOH

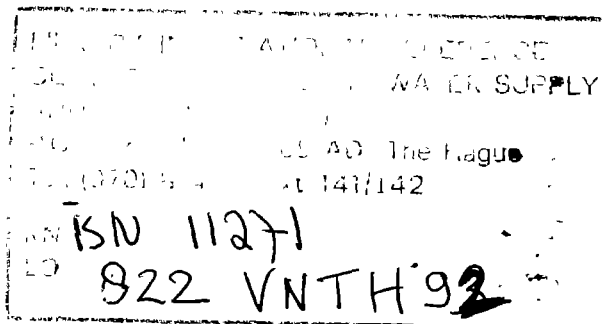




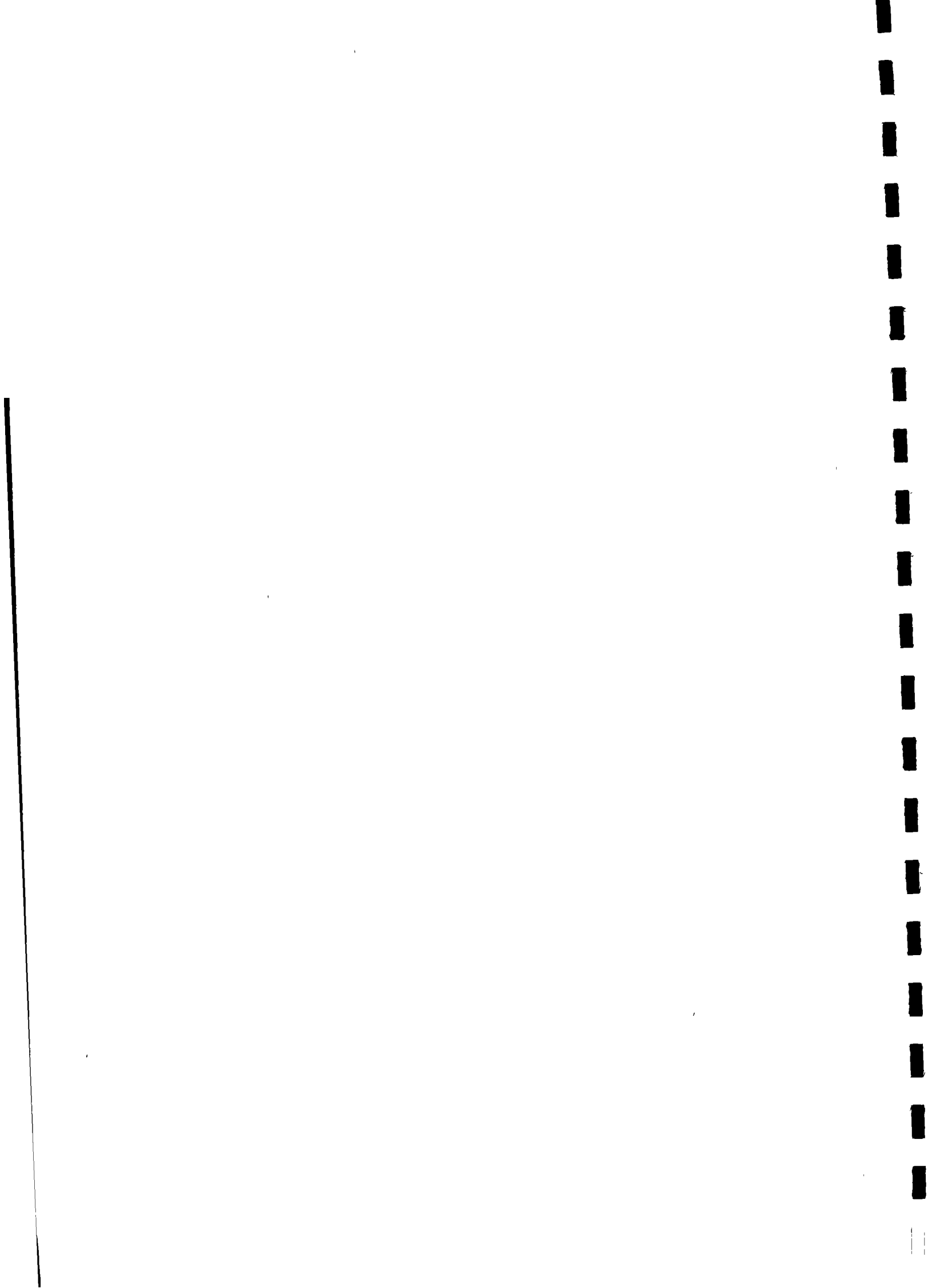


PROPOSAL FOR INTENSIVE SANITATION PROJECT
OF QUYNH PHU DISTRICT, THAIBINH PROVINCE

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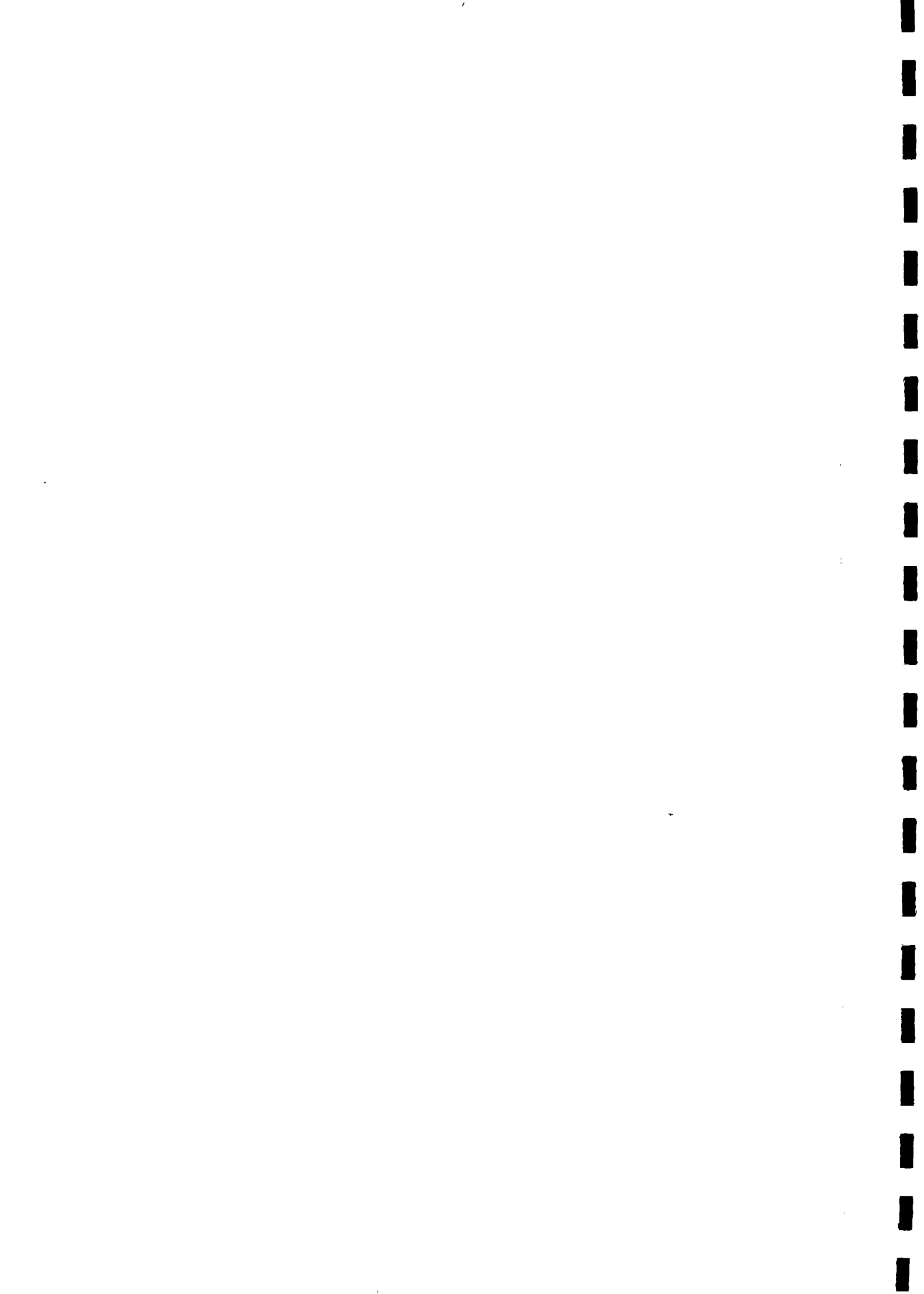


↳ Thai Binh Province



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**INTENSIVE SANITATION PROJECT
QUYNH PHU DISTRICT, THAI BINH PROVINCE**

1. INTRODUCTION

Since 1986 the MOH's Environmental Sanitation Programme supported by UNICEF has been implemented in 20 different provinces of Viet Nam. The programme's technical solution of processing human excreta with water sealed latrines and its objective being to establish and to introduce a sanitation model in 10% of the total number of households.

Realities have shown that this kind of latrines have advantages over the double-vault compost latrines and other existing ones in the country. As a result, it has been accepted by the users and people's need has accordingly increased. Meanwhile support given by UNICEF is somewhat limited.

Therefore, during the January 17th meeting between MOH and UNICEF, it was discussed and decided that pilot activities of the Intensive Sanitation Project should be carried out in one district as model so that the project could be further implemented throughout the country. The programme involves community's participation as the basis of sustainability with maximum use of low-cost components of sanitation facilities. At the same time it includes health education and awareness creation among people so that they can voluntarily have sanitation facilities constructed in their homes.

In Thai Binh, the WATSAN Reference Centre (WSRC) of Thai Binh Faculty of Medicine and the Provincial Centre for Hygiene and epidemiology (CHE) have taken an active part in all activities of the programme. WSRC and CHE are experienced in organizing and implementing pilot projects related to environmental sanitation with support given by MOH and UNICEF, and have gained credibility with the National Sanitation Programme. For that reason, MOH has selected Thai Binh and requested that the two Centres should undertake to implement the Intensive Sanitation Project in one district of Thai Binh province in close coordination with and involvement of the local Women's Union. The point is that with the experience and abilities gained, the Centres will experiment a new method of extending the environmental sanitation programme on district scale and with community's self-provision of financial resources.

This project document was formulated in consultation with the Management Board of the National Environmental Sanitation Programme and UNICEF officers in Ha Noi.



2. PROJECT JUSTIFICATION

Water and Environmental Sanitation is closely related to people's health and qualities of life. However, in rural Viet Nam, backward sanitary customs are continuing and individuals are indifferent to hygiene and health protection of themselves and of their communities. For this reason, it is essential that the project should create awareness to the people so that they can voluntarily have sanitary facilities constructed in their homes and pay for purchase of sanitary components/facility.

A similar project has been carried out in the district of Medinipur of West Bengal state of India, where the implementing agency is a non-government organization - RAMKRISHNA MISSION LOKASIKSHA PARISAD (RKMLP) - which is experienced and credible enough to develop the project. RKMLP implemented the project through its youth clubs in the villages and was under supervision of UNICEF and state government. In Viet Nam, the Women's Union has been selected to be the implementing agency in advocacy and motivation of community for participation in the project.

One district has been chosen as pilot project area where package of sanitation measures could be developed, including waterseal latrines, soakage pits, bathing/urinal platforms, garbage pits, smokeless chula, water wells, rain water containers, fly traps and animal sheds.

In phase 1, from October 1992 to December 1993, activities will be performed in one commune so as to draw necessary experience for the other communes of the district.

The Centres will be responsible to formulate the project, to conduct training of personnel and to organize and manage the work at provincial and district levels. Meanwhile the Women's Union leaders will be trained in project management and techniques. At the commune level, women will be equipped with adequate knowledge to become the real promoters/implementors of the project.

3. SELECTION OF PROJECT AREA

After a series of discussion, it was first agreed by MOH and UNICEF to implement the Intensive Sanitation Project. UNICEF Project Officer (Sanitation), Ha Noi, sent an official letter to Dr. Hoang Dinh Hoi, Director of the National Environmental Sanitation Programme requesting that the selection of project area should be done and preparation of project document should be done in line with UNICEF guidance and with reference to the enclosed documents of a similar project conducted in one district of India.



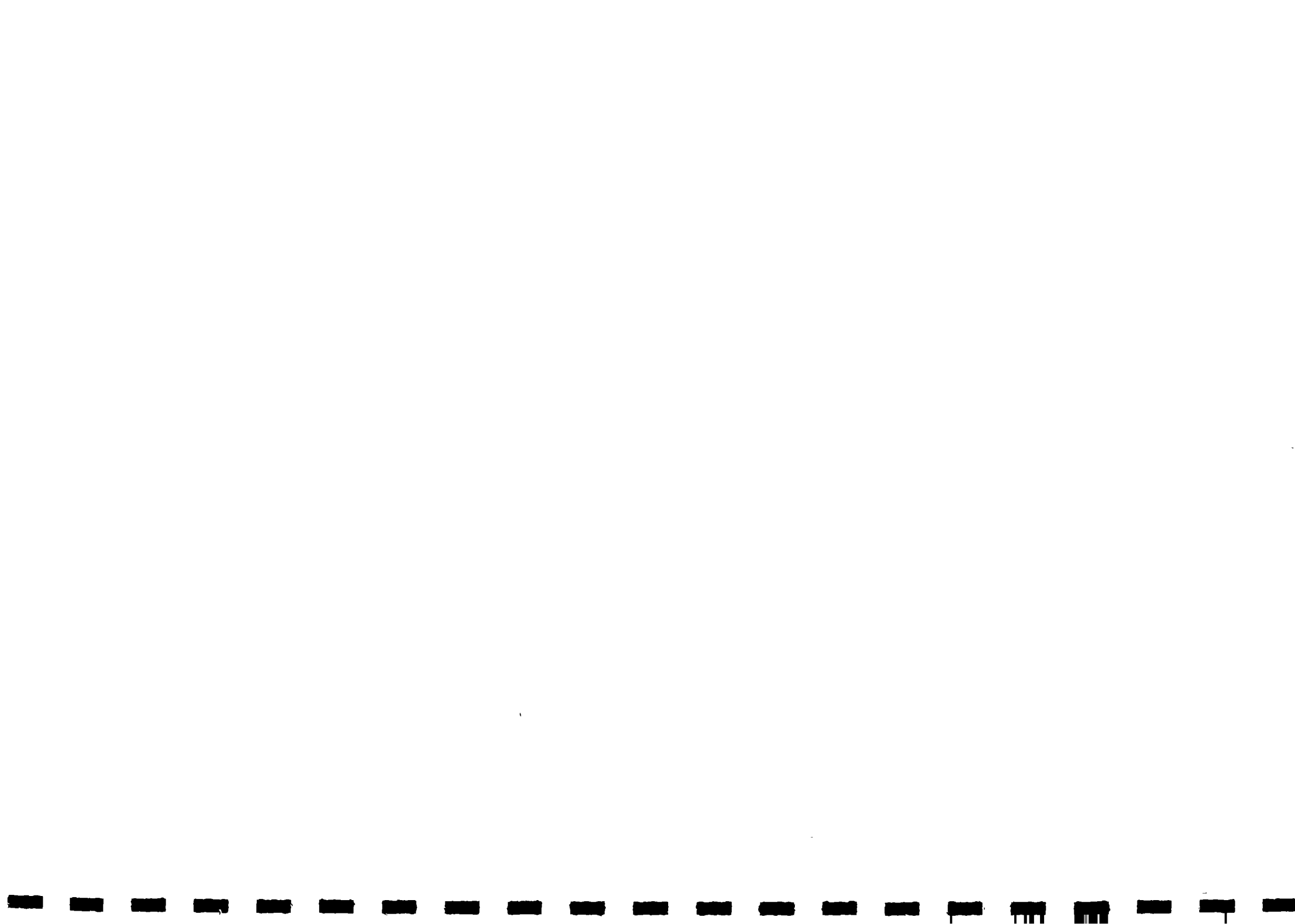
Thai Binh is a province that conducted various environmental sanitation programme in which there have been active participation of WSRC and CHE. For that reason, MOH approached these two centres requesting them to select one district of the province for the Intensive Sanitation Project. In turn, the two centres reported to Thai Binh Provincial People's Committee for approval and received active support from local people and authorities.

Contacts were then made with district authorities of Quynh Phu and it was agreed by and between them that the project should be implemented there and that An Vinh commune was selected as pilot for phase one.

In early May, 1992, UNICEF Project Officers and MOH representatives paid a visit to Quynh Phu district and An Vinh commune where contacts were made and meetings arranged with local authorities, people and representatives of mass organizations. Discussions were held and agreement was made on the selection of Quynh Phu district to be the project area and Women's Unions were chosen to act as the main force in motivation of community's participation in the project. After that, a meeting was held in Ha Noi with UNICEF officers, MOH representatives and representatives from other agencies involved in the project. At the meeting, participants discussed the project contents, implementation and management details. Finally the MOH, upon consultation with UNICEF officers and representatives of related agencies, has officially assigned the WATSAN Reference Centre, Thai Binh Medical College to be the main responsible agency of the project development and management with close involvement of the Women's Unions and other mass organizations such as the Youth Union, the Red Cross Society of Quynh Phu district and An Vinh commune.

4. THE BASIC INFORMATION OF QUYNH PHU DISTRICT AND AN VINH COMMUNE

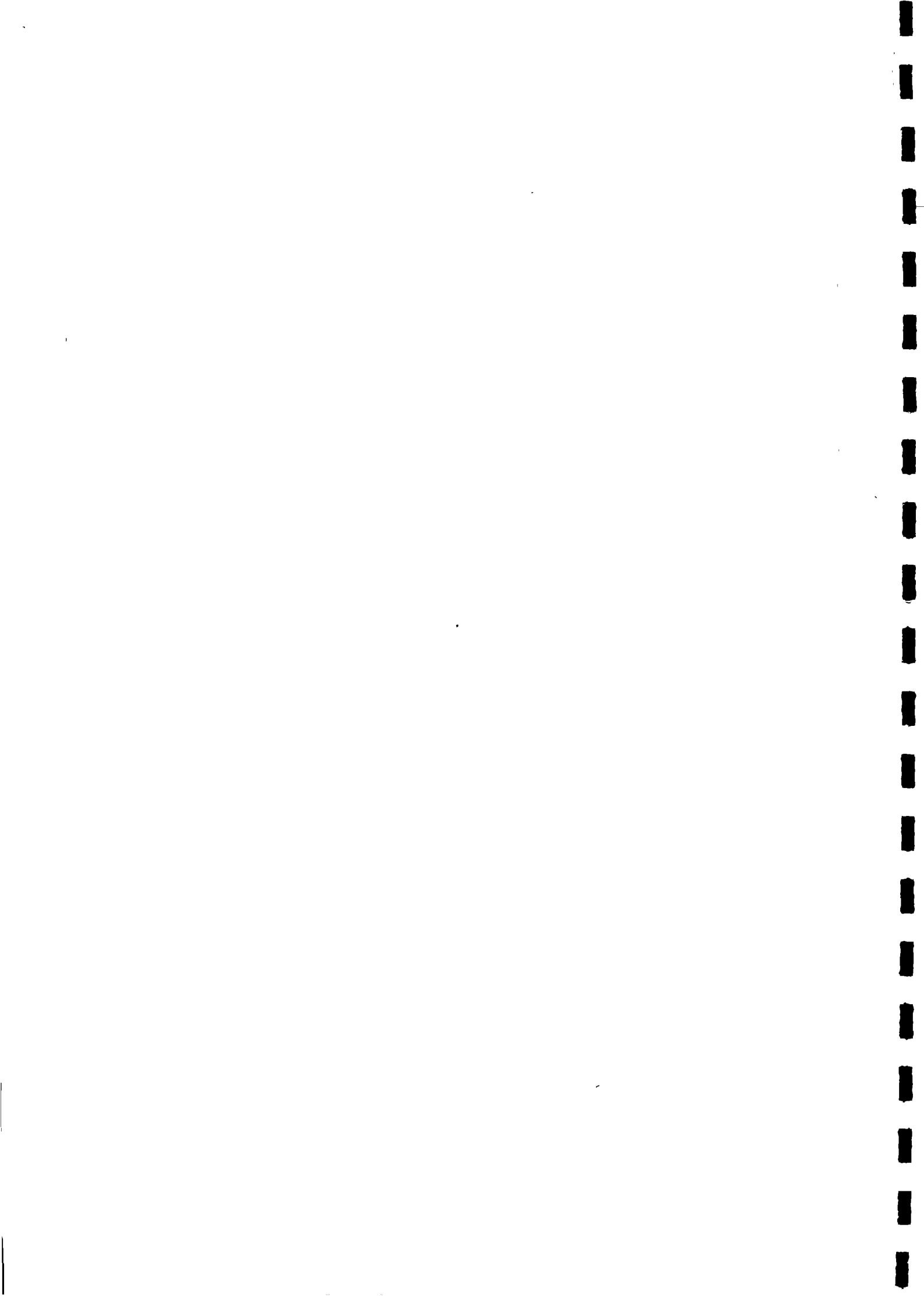
	Quynh Phu	An Vinh
Total population (nos)	232.881	7.581
Male (nos)	109.624	3.432
Female (nos)	123.257	4.159
Total rural population (nos)	227.875	7.581
Male (nos)	106.831	3.432
Female (nos)	121.044	4.159
Total urban population (nos)	5.006	0
Male (nos)	2.792	0
Female (nos)	2.213	0



Total households (nos)	38.526	1.126
Rural (nos)	37.510	1.126
Urban (nos)	1.016	0
Area (sq km)	198,35 km ²	4,85 km ²
Commune (nos)	38	1
Village (nos)	356	15
Total literacy rate (%)	96,8%	97,3%
Male (%)	53%	55,6%
Female (%)	43,8%	41,7%
Average family size (nos)	6	6,7
Average family income per year	800,000 d	600,000 d
Number of schools:		
Primary	40	02
DCC	39	01
KG	38	01
Number of communal health centres	39	01
Number of health workers	156	04

5. OBJECTIVES OF THE PROJECT

- a) To reduce water borne diseases by providing improved sanitation education and low cost sanitation facilities at household and institutional levels.
- b) To make the people aware of personal hygiene, food hygiene, safe water, excreta disposal, solid and liquid waste disposal disease transmission and relationship of safe water and sanitation with health.
- c) To create a better and safe environment for better living through a package of total sanitation measures.
- d) To introduce low cost appropriate technology, making it affordable and acceptable to different categories of people in the rural areas.
- e) To develop and test a methodology and operational strategy so as to make the environmental sanitation programme self-sustaining and self-expanding.
- f) To involve the community, specially the local Women's Union in planning and implementation of the environmental sanitation programme at the grass-root level.



- g) Establish intersectoral linkages. Help promote immunization, ORT, nutrition education and income generation activities amongst the women.

6. TARGETS

- a) General advocacy on environmental sanitation to cover a minimum of 80% population.
- b) 75% of the target households to accept package of sanitary facilities.
- c) Actual construction of sanitary latrines and use and maintenance of sanitary facilities by 50% of the target households.

7. IMPLEMENTING AGENCY

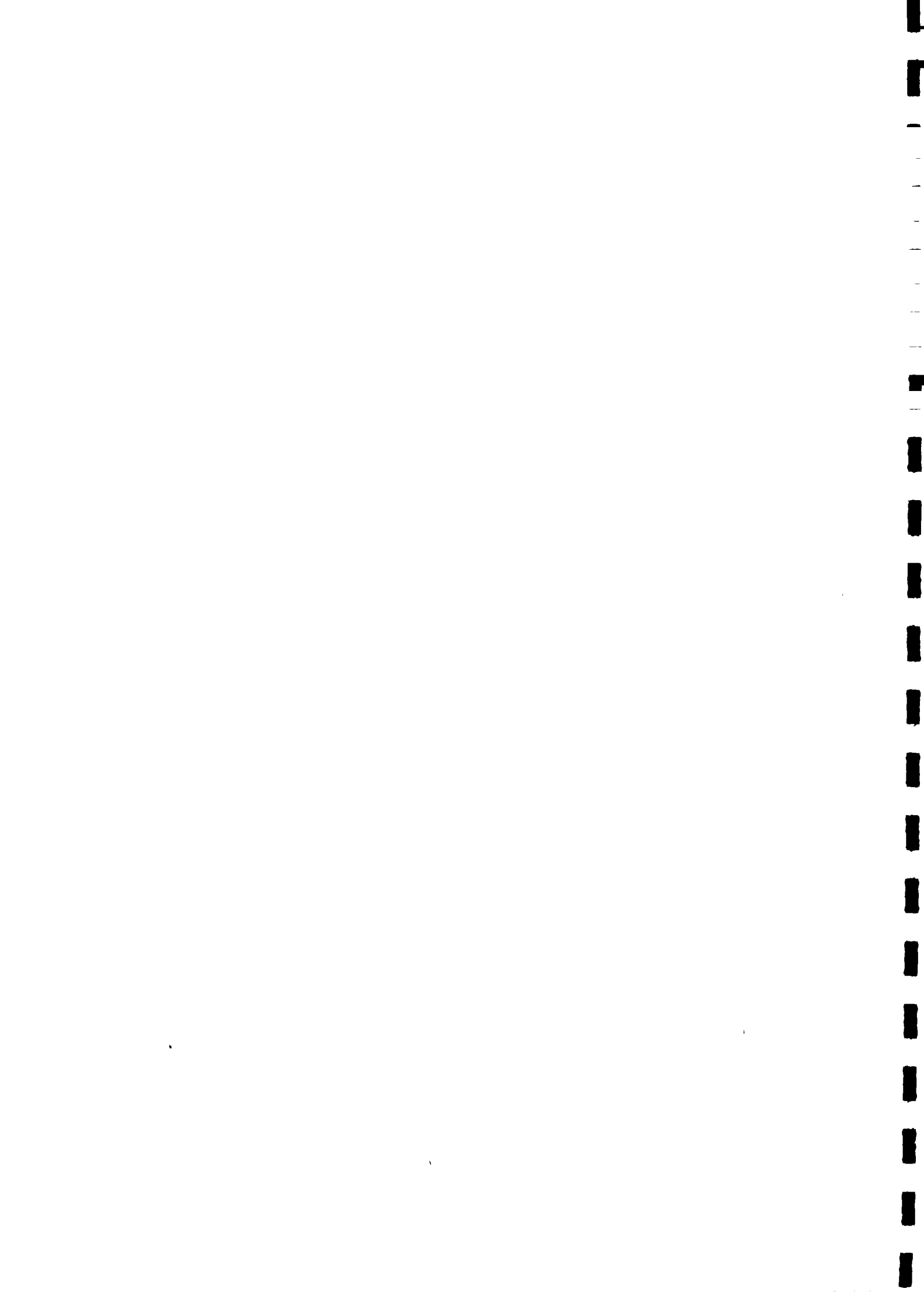
The project is put under the responsibility of the Project Management Board, which will utilise the WATSAN Reference Centre together with the CHE, to manage and monitor every stage of the project. The Women's Unions will be the implementor at the grass-root level. After the first phase of the project, a review will be made to evaluate the project and to see if the Women's Unions would be able to take up the project with more responsibility.

WSRC and CHE have taken active part in various environmental sanitation program and have been confirmed by the MOH to be capable of applying technical advances to Vietnamese rural situation. These two centres are experienced in environmental programmes. Additionally, they are able to conduct training, evaluation, and study programmes in relation to environmental sanitation. Besides, they are equipped with a competent computer centre, a printing unit and a laboratory.

8. COMPONENTS OF THE PROJECT

The project will have the following components:

- a) Strengthening existing infrastructure for project planning, implementation and monitoring.
- b) Conducting a base-line survey in the project area.
- c) Developing communication materials and use appropriate methods of communication in the villages for awareness and demand creation.



- d) Organizing and conducting training/orientation/meetings at different levels.
- e) Mobilizing funds from the beneficiaries and ensuring proper handling of funds/accounts.
- f) Finalizing designs and estimates for low cost sanitary facilities, arranging for the production, storage, distribution of parts for latrines and other facilities.
- g) Constructing sanitary facilities at household levels, ensuring supervision and quality control.
- h) Involving the community, particularly women, at all stage of the programme.
- i) Facilitating augmentation of water supply in the project villages using low cost appropriate technology.
- j) Promoting immunization, ORT, nutrition education and income generation activities in project area.
- k) Monitoring of the project activities, submitting periodical progress reports to the Government and UNICEF and arranging timely review meetings at district and provincial levels.

9. TIME FRAME

4 years 3 months (October 1992 to December 1996)

Phase I: October 1992 to December 1993: 1 year 3 months in one pilot commune of An Vinh

Phase II: January 1994 to December 1996: 3 years for other communes.

10. ASSUMPTIONS

In formulating this project proposal, the following assumptions have been made:

- a) By proper advocacy to a minimum of 80% population, it would be possible to create awareness and motivate 50% of the households to accept the package of sanitary facilities.

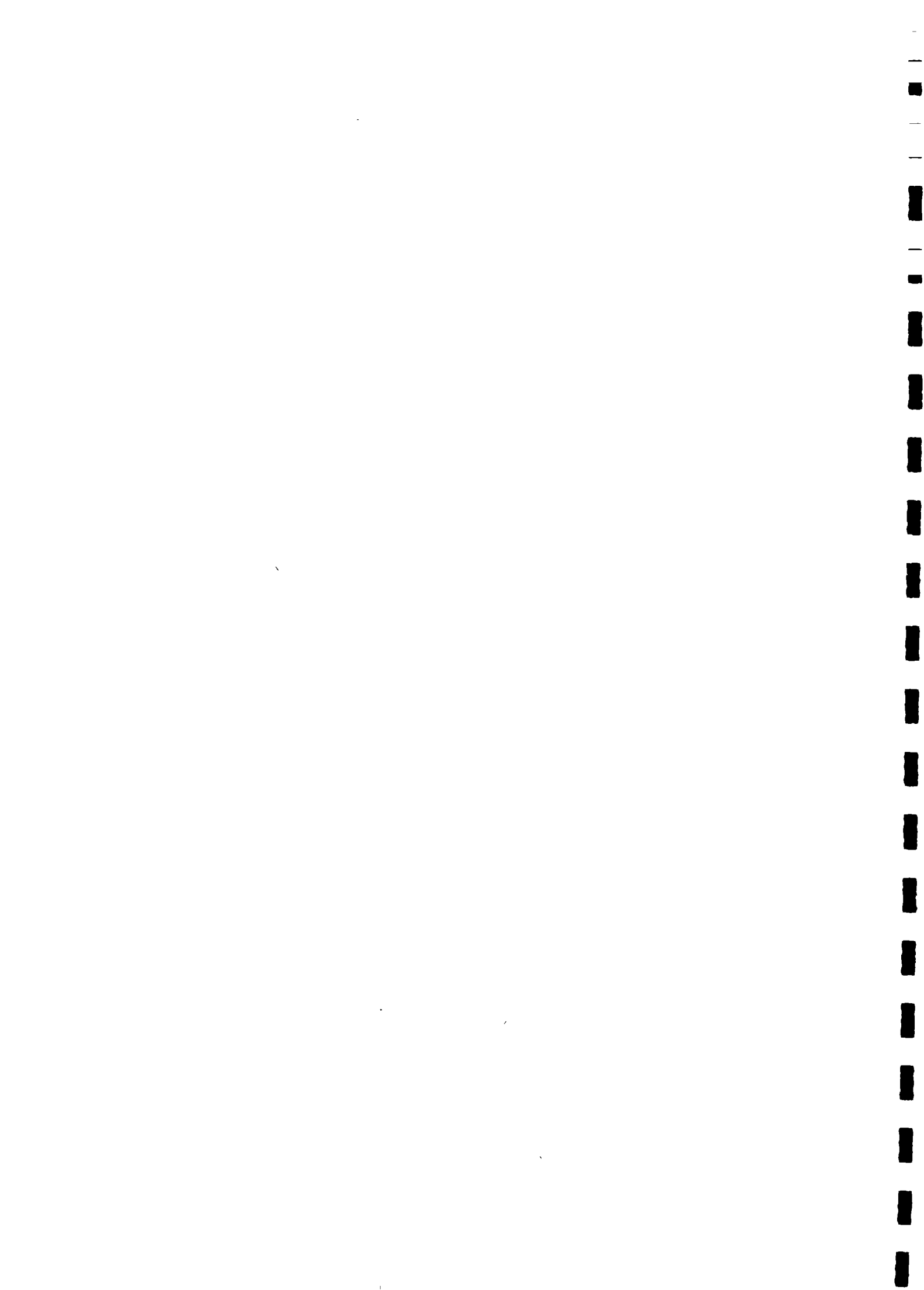
- b) 25% of the total households of the district would come forward to take up the sanitary facilities by paying outright
- c) Another 25% of the total households would participate in the programme by paying monthly installments, either in advance or after installation
- d) Women's Unions would voluntarily implement the programme for the benefit of their own community
- e) By making low cost technology affordable and acceptable, it would be possible to recover part of the costs spent on advocacy, training and establishment, out of the fund recovered from the construction programme
- f) Mobilization of such huge resources, required for the construction of sanitary facilities to cover 50% of the total households, would not be possible from other sources, unless the beneficiaries pay for themselves
- g) To a certain extent, SVR, provincial government and UNICEF, banks and other financial institutions may cooperate to make the fund available initially
- h) Certain percentage of cost for advocacy, training and infrastructure development may be available from UNICEF initially. It would be tried to absorb these costs by the Government implementing agency and beneficiaries ultimately. To the extent possible, revolving fund would be created from where loan would be provided to the most needy beneficiaries as incentive for creating better motivation to accept the programme
- i) It is expected that advocacy on sanitation development will motivate the people to come forward to accept the low cost affordable sanitation facilities by paying full cost of units. In case we do not make a headway in making the programme acceptable to the people on payment of full cost, Women's Unions will not continue the project beyond the initial period of 1 year 3 months. On this event, which we hope will not happen, it is expected that the initial cost of advocacy, training and administration & establishment will be borne by UNICEF, as per agreed project proposal.

11. STRATEGY

- a) The Project Management Board, described in Section 14, will seek all necessary cooperation from the Women's Unions, Centre for Hygiene and Epidemiology, WSRC provincial government, other agencies and the district administration for proper implementation of the program
- b) The Project Management Board will guide the project staff and implement the project through District Women's Unions and Commune Women's Unions
- c) One motivator per 100 families would work for advocacy, promotion, training, construction, monitoring and reporting of the project
- d) The project will be based on the following two basic principles:
 - i) Total cost of the programme including a part of the cost for advocacy, training, establishment etc will ultimately be recovered from the unit cost of various sanitation facilities. Financial propositions would be designed accordingly.
 - ii) Affordability to all categories of households with different income levels would be maintained. To achieve this, different low cost options and repayment terms would be designed.

12. FINANCIAL PLANNING

- a) Payment for any activity is linked with production
- b) The seed money received as grant/subsidy from any organisation/institution would be made into a revolving fund for continuing the programme
- c) While people would be encouraged to have their own sanitary facilities built by themselves at their own cost, such facilities would be made available also by the Women's Unions against outright full payment, before or after construction, and against a portion of loan to be repaid in one or more installments
- d) Full recovery and ploughing back of resources would be an in-built component of the project



- e) Financial incentive, if any, to the motivators and all those linked with the project implementation, would be provided out of the income earned from the project itself
- f) The fund for this project would not be mixed up with other fund and separate ISP account would be maintained at each level. Proper forms and registers would be designed and used as necessary.

13. PROJECT IMPLEMENTATION

A. Organisation and infrastructure development:

Ministry of Health, SRV, will be the model department for the project. The Management Board will manage and monitor the project through District Women's Union. The Women's Union of An Vinh commune will implement the work first. In most cases suitable and capable women volunteers would be selected as motivator. TABLE 1 shows the organisational details, function aries, motivators, masons etc to be placed in position for executing the project within the time period.

B. Time frame:

The project would be implemented in 4 years 3 months, beginning from October 1992 and ending in December 1996. The coverage of number of households for advocacy and implementation of sanitary facilities during this time frame is shown in TABLE 2. The programme will continue even after the project period, to cover the remaining 50% of the households, which may not need any additional financial input.

C. Baseline information:

The first duty of the motivator would be to visit the households and collect the baseline information in prescribed proforma within his/her jurisdiction on health, water and sanitation. Each motivator would cover 100 households for advocacy and would motivate 50 households to avail the package of sanitary facilities. The baseline information would be compiled by Women's Union at the commune under the guidance and supervision of the District Women's Union and support from coordinating agencies. A copy of the same would be made available to UNICEF and MOH.

The District Women's Union would collect baseline information on water and sanitation facilities available in the villages under their own jurisdiction which would help in planning and implementation of the programme. It would also help in providing the required facilities in the village



through other government programmes. This basic information about the villages would also be made available to the WSRC, and PMB which would be shared with MOH and UNICEF. A proper proforma would be designed for this purpose for collection of the necessary data and information.

D. Information, Education, Communication (IEC)

The success of this programme, which is entirely dependent on voluntary/active participation of the community in improving their own environmental sanitation, depends on the effort made on advocacy and awareness creation. This is more particularly important because the fund requirement for implementation is primarily to come from the beneficiaries. Therefore, all channels of communication to the rural population, which are suitable in this region, would be tried. The details of the advocacy proposals at the provincial, district and commune level, yearwise, have been shown in TABLE 3A, 3B, 3C indicating the cost involved thereon, including expenditure on audio visual equipment/materials and recurring costs.

E. Training:

It would be a big task to train all the functionaries, motivators, masons etc, required to cover all the communes within the time frame. The training programme and the schedule of training at provincial, district and commune levels, yearwise, have been shown in TABLE 4A indicating also the cost involved. TABLE 4B gives the details of training activities and TABLE 4C shows the number of personnel to be trained.

F. Construction programme:

In order to make the low cost technology affordable by different categories of rural population, alternative models of low cost water seal latrines would be tried. These would be:

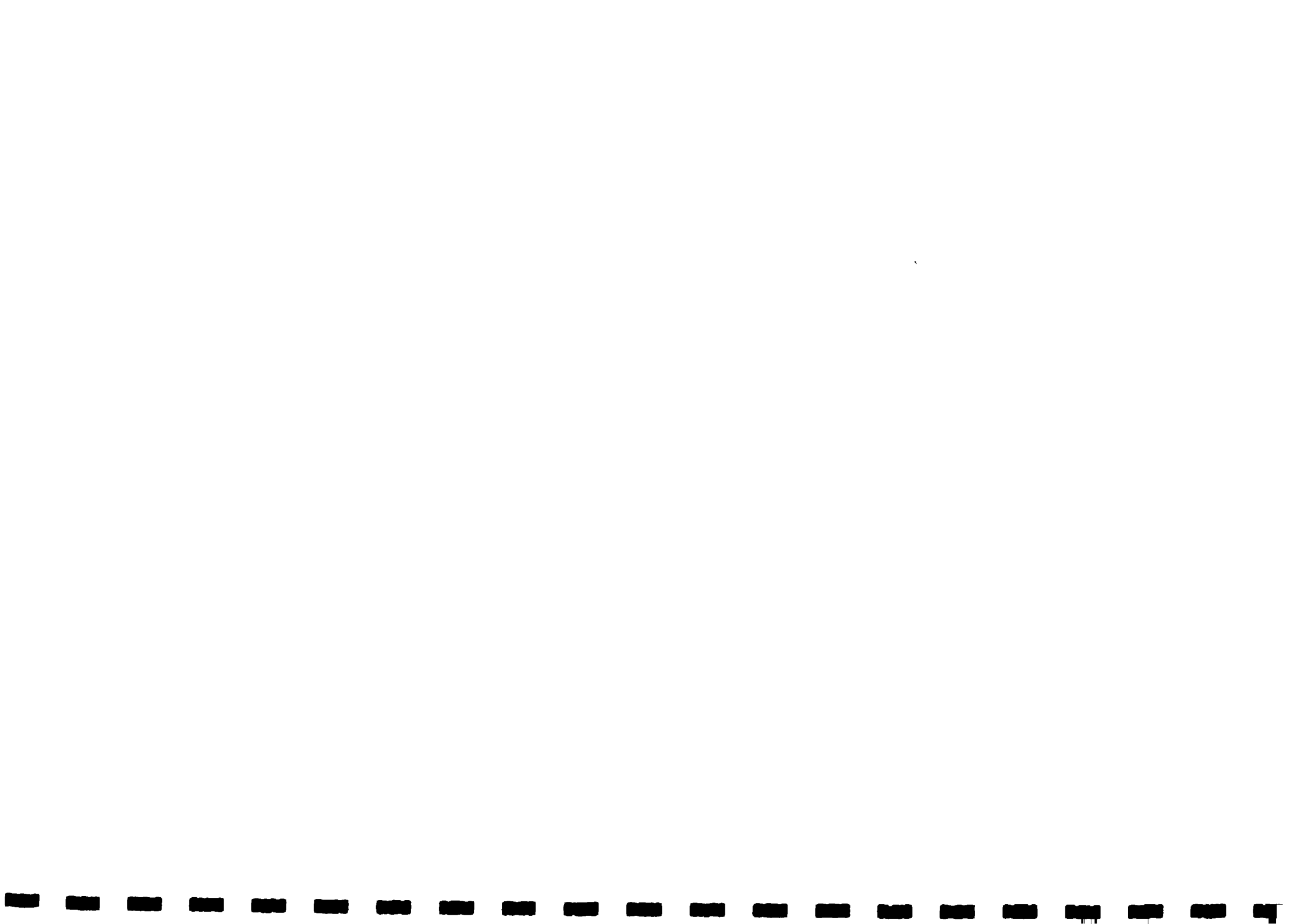
- i) Two pit units with different lining materials
- ii) One pit unit with concrete ring, earthen ring, and other lining materials. To standardize the quality of construction and make the parts simple and easily available, pre-fabricated latrine slabs, fitted with pan and trap, concrete rings and earthen rings for pit lining would be produced. These items will be made available in one place in each commune so that the villagers could purchase it outright, carry and could build their own latrine themselves. The Women's Union would build for those who can not build for themselves. The superstructure construction would be the responsibility

of the beneficiary, but the Women's Union would do it against payment.

The other facilities like bathing platform, kitchen platform, soakage pit, garbage pit, smokeless chula, vector control, water storage, etc if not already existing, would also be provided in each household when a latrine is built. The programme of construction of sanitary facilities and fund requirement, yearwise, have been shown in TABLE 5A. The estimated cost of sanitary facilities per unit have been shown in TABLE 5B and the construction load per commune and motivator, yearwise, is shown in TABLE 5C.

G. Modalities of implementation:

The Management Board will plan the overall strategy of implementation of the project. Minimum essential posts will be created for this project, at the provincial and district level. One fully equipped mobile advocacy team would be maintained at the provincial level, which will work for the Women's Union. In each commune, there would be an additional provision of advocacy materials and facilities to arrange meetings, exhibitions and awareness creation campaigns regularly according to a predetermined schedule. A project coordinator under the Management Board at the provincial level will coordinate and administer the project. The advocacy part, as detailed in TABLE 3A, 3B, 3C, would be guided by one official having competence in communication. The training, as detailed in TABLE 4A, 4B, 4C, establishing construction costs (Ref TABLE 5B), quality control and monitoring would be guided by another official, competent on technical aspects. One project officer (accounts and budget), would be on overall charge of financial planning, fund flow, recovery, accounting and evaluation of the project. These posts would be created at the provincial level, to work at the district level, initially. A Project Officer (Implementation) at the district level would be responsible for implementation of the sanitary facilities in the household, income generation and water development as detailed in TABLE 8. All activities of actual, implementation, to be carried out by the commune Women's Union would be supervised by the Project Officer (Implementation), under the control of the project Management Board. The District Women's Union would receive funds from the project Management Board and would repay the same along with regular submission of accounts. In turn, the District Women's Union would assist their commune Women's Union in implementing the programme and exercise financial and technical control on them. All the training at the field level would be done by the district except a few important trainings which could be carried out at the provincial level.



The costs of administration and establishment have been shown in TABLE 6A, 6B, 6C. The total cost of software provision in the project (advocacy, training, administration and establishment) has been shown in TABLE 7

H. Intersectoral linkage:

The motivators will be trained to promote immunization, ORT, nutrition education, hygiene, primary health care and other aspects that are related to the well being of children and women. Income generation activities for women will be supported at the household level, using the experience of Women's Union in other areas. Attempts would be made to augment water supply in the project villages using low cost appropriate technology for convergence with sanitation. TABLE 8 shows the amount of loan to be invested for income generation activities and water development as a part of the total cost of implementation.

I. People's participation in self financing:

Since the fund requirement for implementing such a big programme involving an entire district is enormous, it would not be possible to expect availability of funds from government or other financing institutions immediately. Therefore, the only alternative for programme implementation would be to raise the fund from the participating beneficiaries. Information collected from the district and commune People's Committee suggests that about 33% of the rural households can afford to pay in full for the sanitary facilities if they are properly motivated. On this assumption the raising of funds from the beneficiaries have been designed. About 25% of the households have been estimated as capable to pay outright. The remaining 25% of the entire households would be covered under a monthly deposit scheme of 12 month's duration in advance or a loan scheme, to make them eligible to get the facilities. The loan will be repaid within 12 months with interest in one or more installments. It is hoped that once the initial restraints/doubts/difficulties are removed through proper and adequate awareness creation, it would be possible to make at least 50% of the households to come forward and accept the facilities. The strategy of recovery of cost of sanitary facilities from beneficiaries through commune Women's Union, yearwise, is shown in TABLE 9.

J. Recovery of funds:

The primary responsibility of realisation of funds would be linked with commune Women's Union under direct supervision of the district Women's Union and WSRC. They are to extend the programme in their jurisdiction through their own effort.



TABLE 10 indicates the feasibility of operating the programme in self sustaining manner, by recovering a part of the expenses incurred on software provision and administration. An amount out of this earning is set aside for the motivators to continue advocacy and social mobilization for a period of 2 years. The payment to motivators would be linked with the construction of facilities. It could be between 1000 dong to 2000 dong as incentive per each item constructed, which will be earned only when the assigned task is completed. The recovery from the beneficiaries for the sanitation facilities will include 10% service charge (Ref TABLE 5B and Note 3).

K. Mobilization of funds

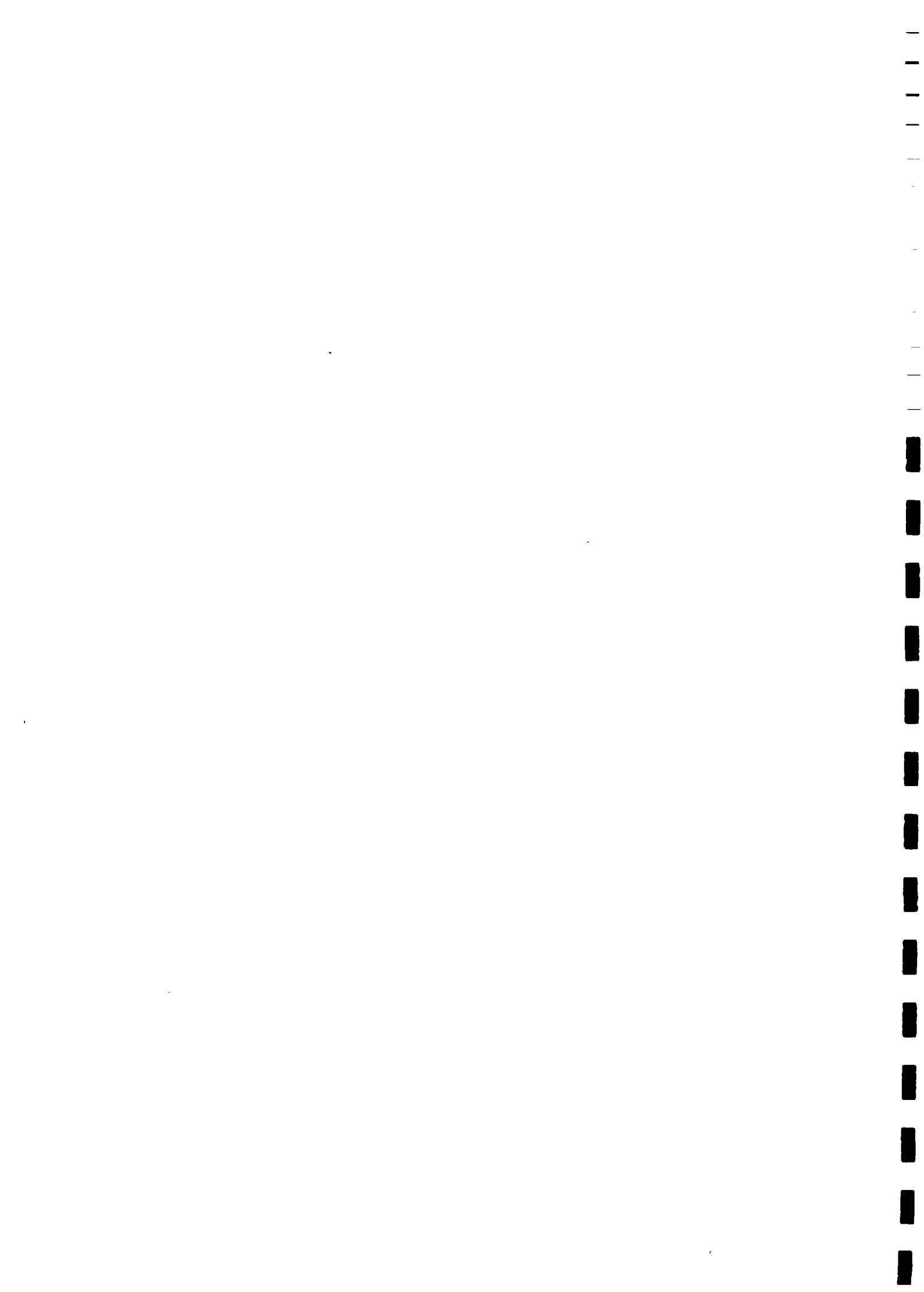
It is expected that UNICEF will advance estimated amounts to cover the cost of advocacy, training, administration and part of the revolving fund. The Government at the level of the ministry, province, district and the communes, would provide the supporting facilities, premises, equipments and personnel, as required, as their share of administration and establishment cost, besides contribution to the revolving fund. This has been shown in detail in TABLE 11.

L. Project viability:

TABLE 9 indicates that except for the software cost, the entire cost of implementation and the loan would be fully recovered. Further, no investment would be needed for the implementation on the last year of the project. As shown in TABLE 11 it would also not be necessary to contribute in the revolving fund on the last year of the project.

14. RESPONSIBILITIES

Ministry of Health of Viet Nam is the managing organisation of the project and will periodically review the progress of implementation of the project at provincial, district and communal levels. A project Management Board will be set up by the MOH, comprising representatives of MOH, WSRC, Women's Union, CHE and members of provincial People's Committee. The overall organisation and implementation of the project will be undertaken by the Project Management Board as described in this plan of action. Disimbursement of fund will be made by UNICEF to PMB, upon request from MOH, as mentioned in the Plan of Action or as otherwise agreed between MOH and UNICEF with reference to the real expenditure.

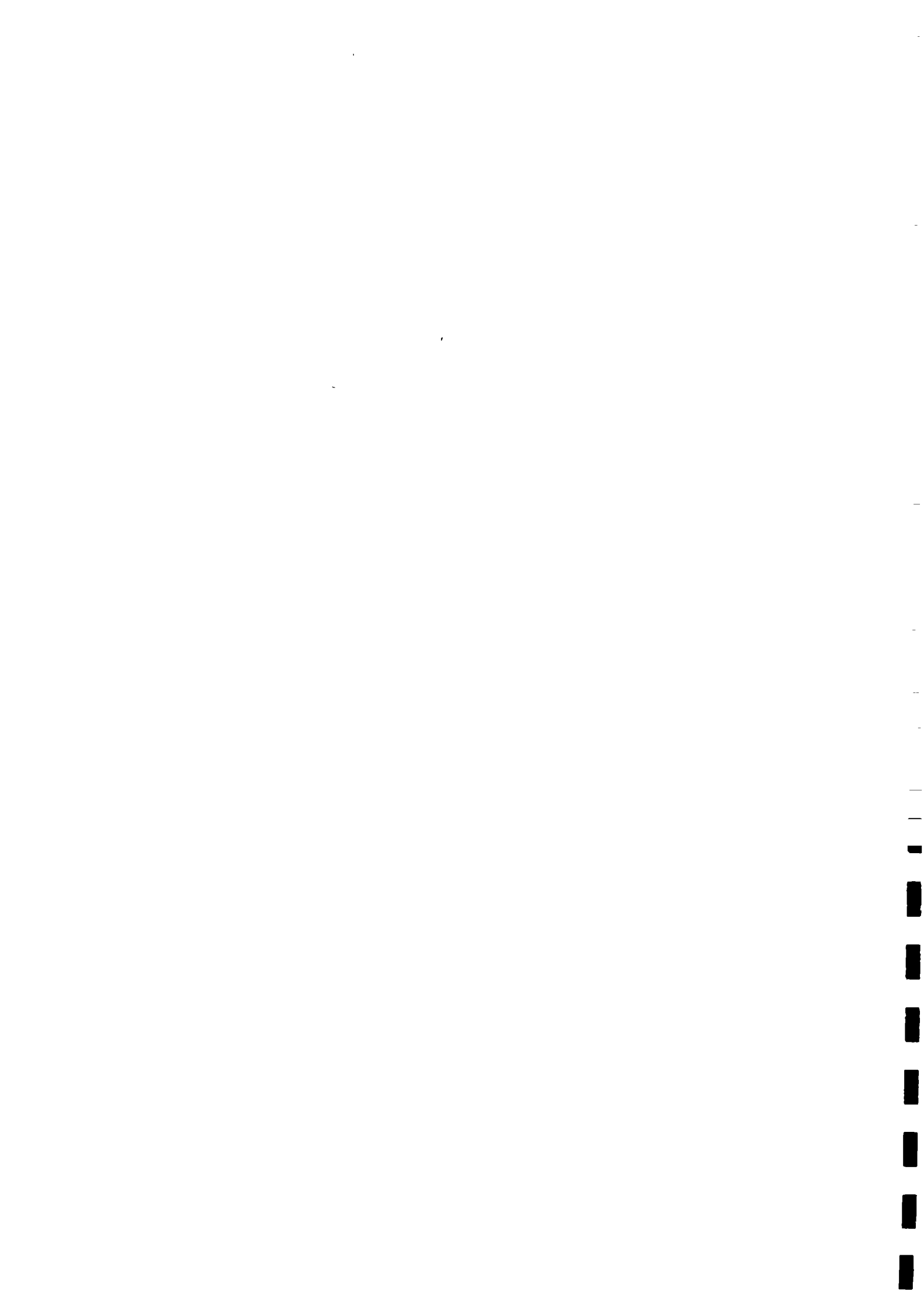


The Project Management Board will:

- a) Approach UNICEF, MOH and receive UNICEF assistance and will try to get all necessary help, assistance and cooperation from Thai Binh Provincial Authorities and other organisations.
- b) Organize the full infrastructure in time.
- c) Develop all communication and motivation materials.
- d) Develop and introduce communication methods appropriate to villages for advocacy and awareness creation on environmental sanitation as well as immunisation, ORT and nutrition education.
- e) Develop all forms including reports and recording forms.
- f) Organize and conduct all training/orientation and meetings at different levels.
- g) Construct sanitation facilities at household level through district and communal Women's Unions.
- h) Manufacture latrine components at different levels and arrange storage, distribution and sales.
- i) Mobilize fund from different sources.
- j) Handle fund in separate account and enforce the same at lower levels.
- k) Submit report on progress of implementation and accounts every month to MOH and UNICEF.
- l) Collect fund from beneficiaries with assistance from Women's Unions at different levels and regulate their share of income.
- m) Control all the activities of the project which are not allocated to Women's Unions of district and communes.
- n) Promote income generation and water development activities among villagers.
- o) May authorize WSRC to act on its behalf in implementing specific activities of the project, particularly during the initial phase.

UNICEF will:

- a) Provide estimated financial support and assistance for advocacy and training



- b) Provide technical guidance in implementing the project.
- c) Support all activities of communication and advocacy.
- d) Provide transport and audio visual equipments required for the project.
- e) Support the pay and allowances of the personnel at the central and district level for the project period on mutually agreed terms.
- f) Participate in regular review meetings.
- g) Help in monitoring and evaluating the project during and after the implementation.

MOH will:

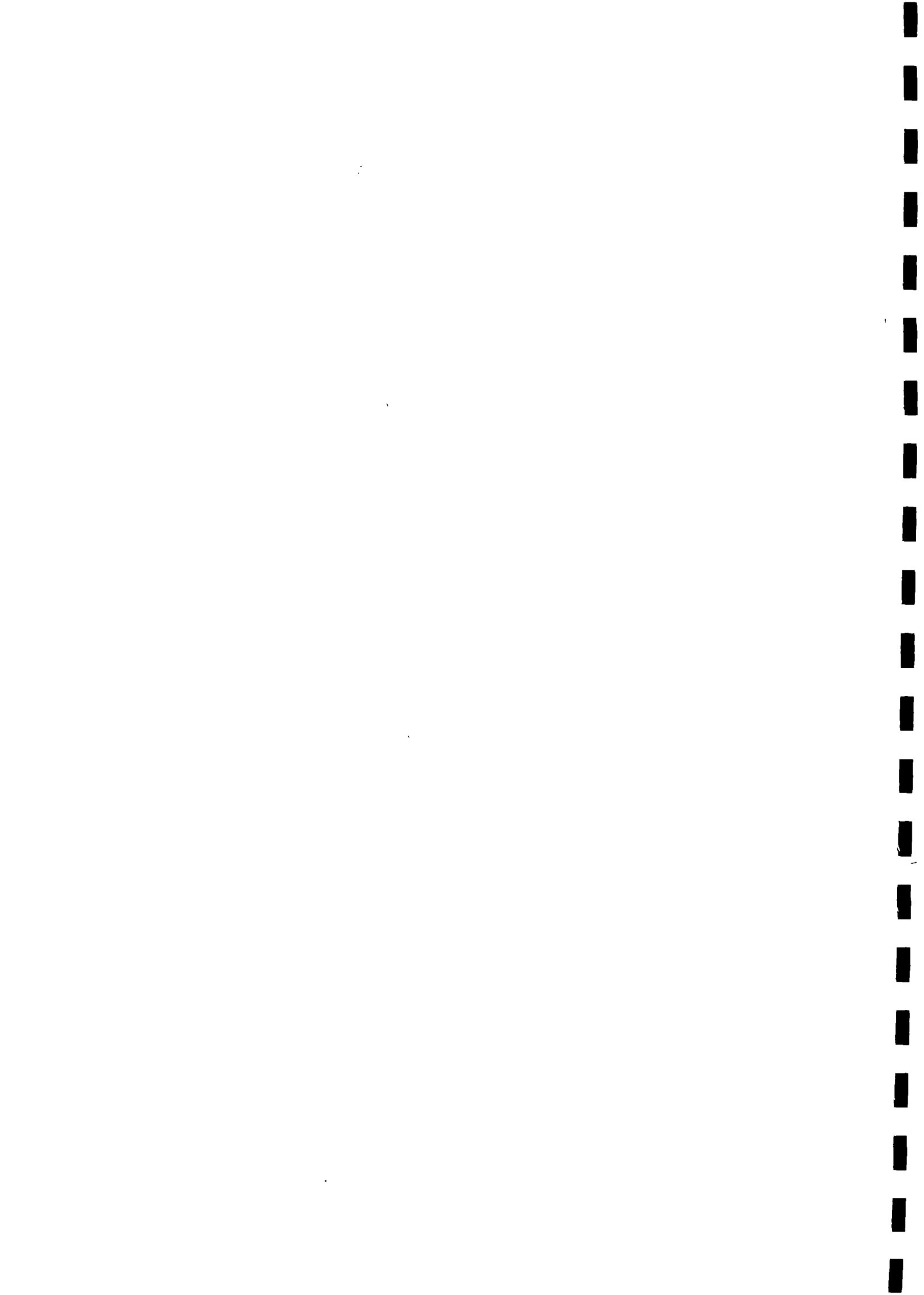
- a) Control and supervise all activities of PMB, WSRC etc as well as the financial sources and utilisation of fund.
- b) Participate in regular review meetings to monitor progress, controlling of activities and evaluation, together with UNICEF.

15. REPORT AND RECORD KEEPING:

Proper formats should be designed to give a clear picture of all activities of advocacy, motivation and implementation of the project at communal level.

Motivators report to communal Women's Unions. The communal Women's Union will then report to the district level and finally to WSRC/PMB. In turn, WSRC/PMB will report to MOH and UNICEF on monthly basis. These reports should show progress of motivation, advocacy and utilisation of sanitation facilities as well as project funds.

Each commune will maintain proper records of materials and progress which should be in separate registers and will be reviewed by Women's Union of the district on monthly basis. Similar records will be kept at district level and will be reviewed by WSRC/PMB on monthly basis. Separate account at commune level Women's Union will be maintained and jointly operated by Women's Union's secretary and district Women's Union's representative. Similarly, separate account at district level would be maintained and jointly operated by district Women's Union secretary and WSRC/PMB's representative. The auditing unit of WSRC/PMB will regularly review the account of Women's Unions at district and commune level.



16. MONITORING:

For reviewing the progress of work there will be management committees at central, district and commune levels. Members of such committees are decided by MOH. The central committee will meet at six months intervals, the provincial committee at quarterly intervals and the district level once every month.

The review will cover all aspects of advocacy, awareness creation, facilities provided, status of fund realisation and details of payments by beneficiaries.

17. EVALUATION:

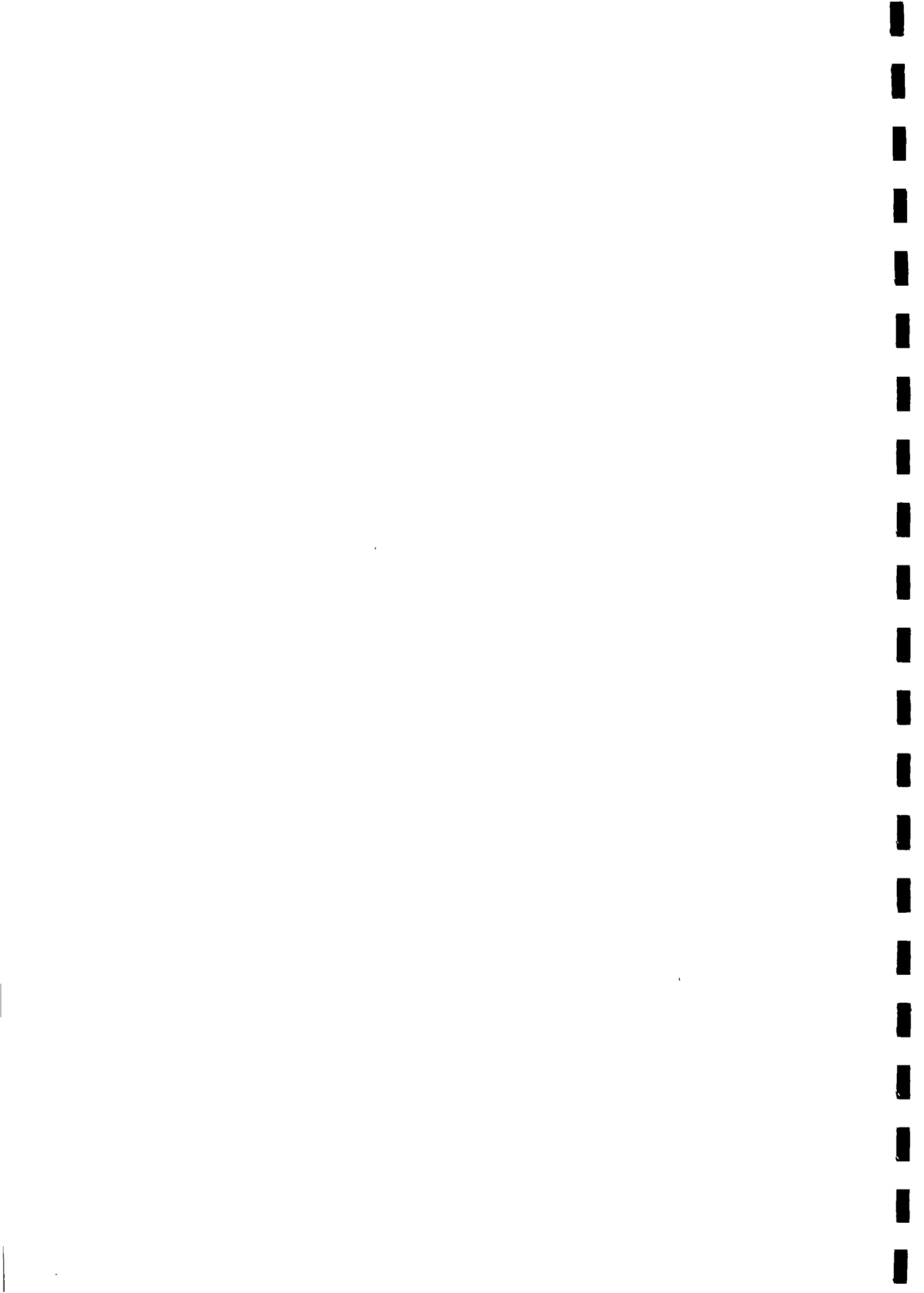
Periodical evaluation of the progress of implementation and utilisation of funds would be done jointly by UNICEF, MOH and WSRC/PMB. This would help in suggesting improvement/modifications in the implementation process. Final evaluation would be done by an external agency, agreed by MOH and UNICEF, at the end of the project.

18. DOCUMENTATION:

Every aspect of advocacy, IEC activities and construction would be recorded and documented throughout the project period. This would help in understanding the stages of planning, decision making and implementation, assessing the project progress and the effectiveness of all the activities for replication. Documentation would be done in consultation with UNICEF.

19. END PRODUCT OF THE PROJECT

- a) 80 % of the families would benefit from sanitation facilities, knowledge on personal hygiene practices and health education.
- b) 50 % of the families would be possessing a package of low cost sanitation facilities in their households.
- c) 20 % of the families who accept sanitation, would benefit from income generation activities (Note 1, Table 8).
- d) 20 % of the families who accept sanitation, would possess better provision of water (Note 2, Table 8).
- e) Cost of all sanitary facilities in the households, amounting to 4,15,550 thousand dong (412,102 USD), (col 2 Table 8),



would be contributed fully by the beneficiaries.

- f) Loans given for sanitary facilities, income generation activities and water development would be fully recovered (Table 9).
- g) An amount of 253,483 thousand dong (22,632 USD) is likely to be earned out of the given loans which will pay for part of the cost of software (ref. col 6 Table 10).
- h) An amount of 912,800 thousand dong (81,500 USD) would accumulate in the revolving fund at the end of 1997. In addition a running capital of 425,600 thousand dong (38,000 USD) would be in the hands of the communes (see Note in Table 11). These amounts can be reused for similar projects in other districts.
- i) A methodology of implementation involving grassroot level women's organisation, communes, district and provincial authorities and the Ministry would be developed and tested which could be replicated.
- j) All appropriate materials for training and advocacy would be developed and tested which would be ready for use in the future expansion of the programme.
- k) The total final non-recoverable cost of this project is 1,184,990 thousand dong (105,802 USD)(ref. col 2 Table 11) which would be required for software provisions (Advocacy, Training and Administration and Establishment). This would benefit 39,100 households in the district initially, with a per household investment of 30.3 thousand dong (2.7 USD). This investment would have a profound effect on the people of other districts and would motivate them to help themselves in a similar way.

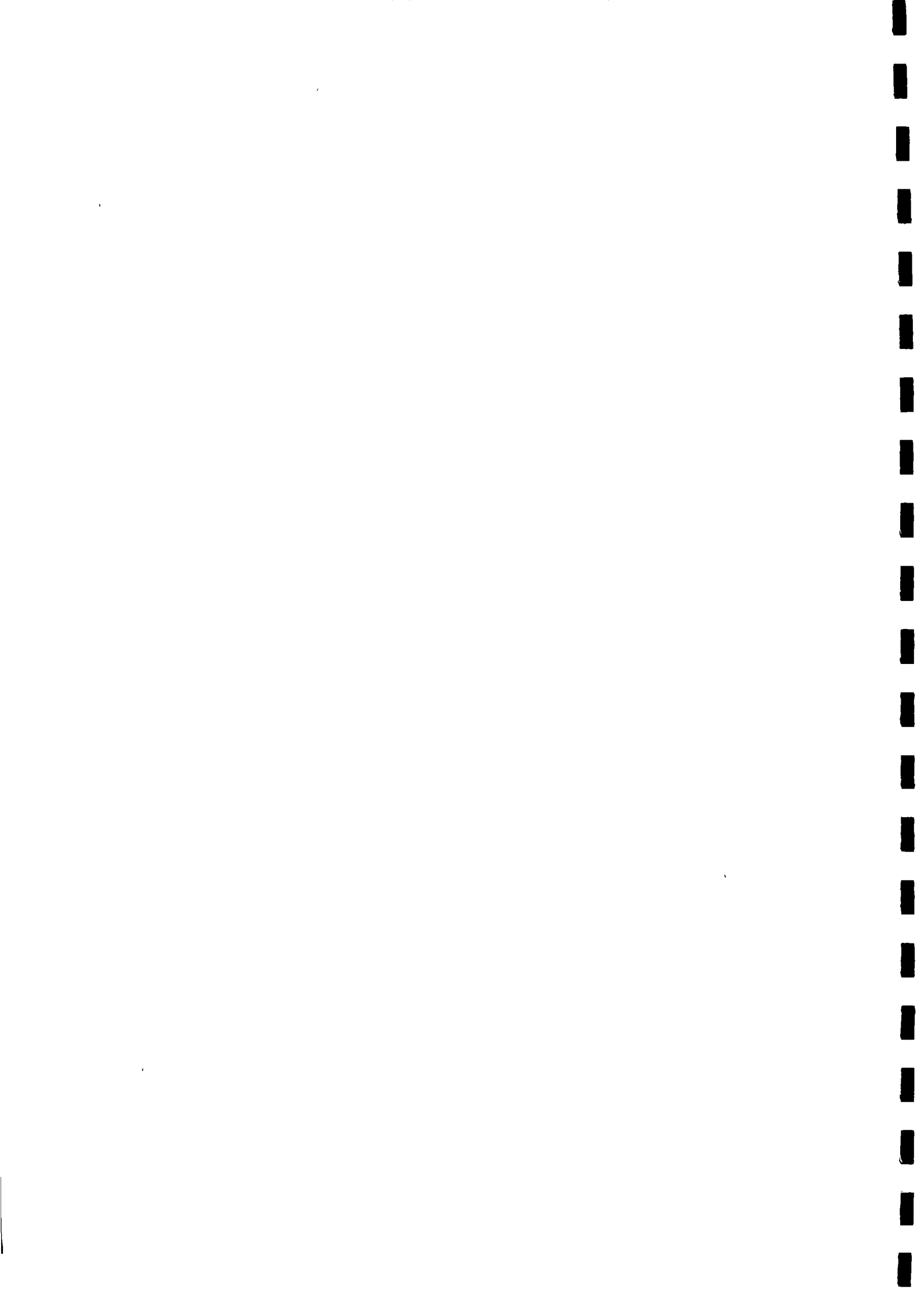


TABLE 1: ESTABLISHING ACTIVE UNITS FOR IMPLEMENTATION

Commune	Phase I				Phase II					
	Oct-Dec 1992		Jan-Dec 1993		Jan-Dec 1994		Jan-Dec 1995		Jan-Dec 1996	
	CWU	M	CWU	M	CWU	M	CWU	M	CWU	M
An Vinh commune	1	10	1	10						
Other commune					37	370	37	370	37	370

TABLE 2: COVERAGE OF NUMBER OF HOUSEHOLDS FOR ADVOCACY AND IMPLEMENTATION OF SANITARY FACILITIES

Commune	Activities	Phase I				Phase II					
		Oct-Dec 1992		Jan-Dec 1993		Jan-Dec 1994		Jan-Dec 1995		Jan-Dec 1996	
		M	HH	M	HH	M	HH	M	HH	M	HH
An Vinh commune	Advocacy	10	300	10	700						
	Implementation		150		500						
Other communes	Advocacy					370	11.100	370	14.800	370	12.200
	Implementation						5.500		7.400		7.000

Abb: CWU - Commune Women's Union
M - Motivator
HH - Households

Coverage of households

	<u>Phase I</u>	<u>Phase II</u>	<u>Total</u>
Advocacy	1000	38,100	39,100
Implementation	650	19,900	20,550

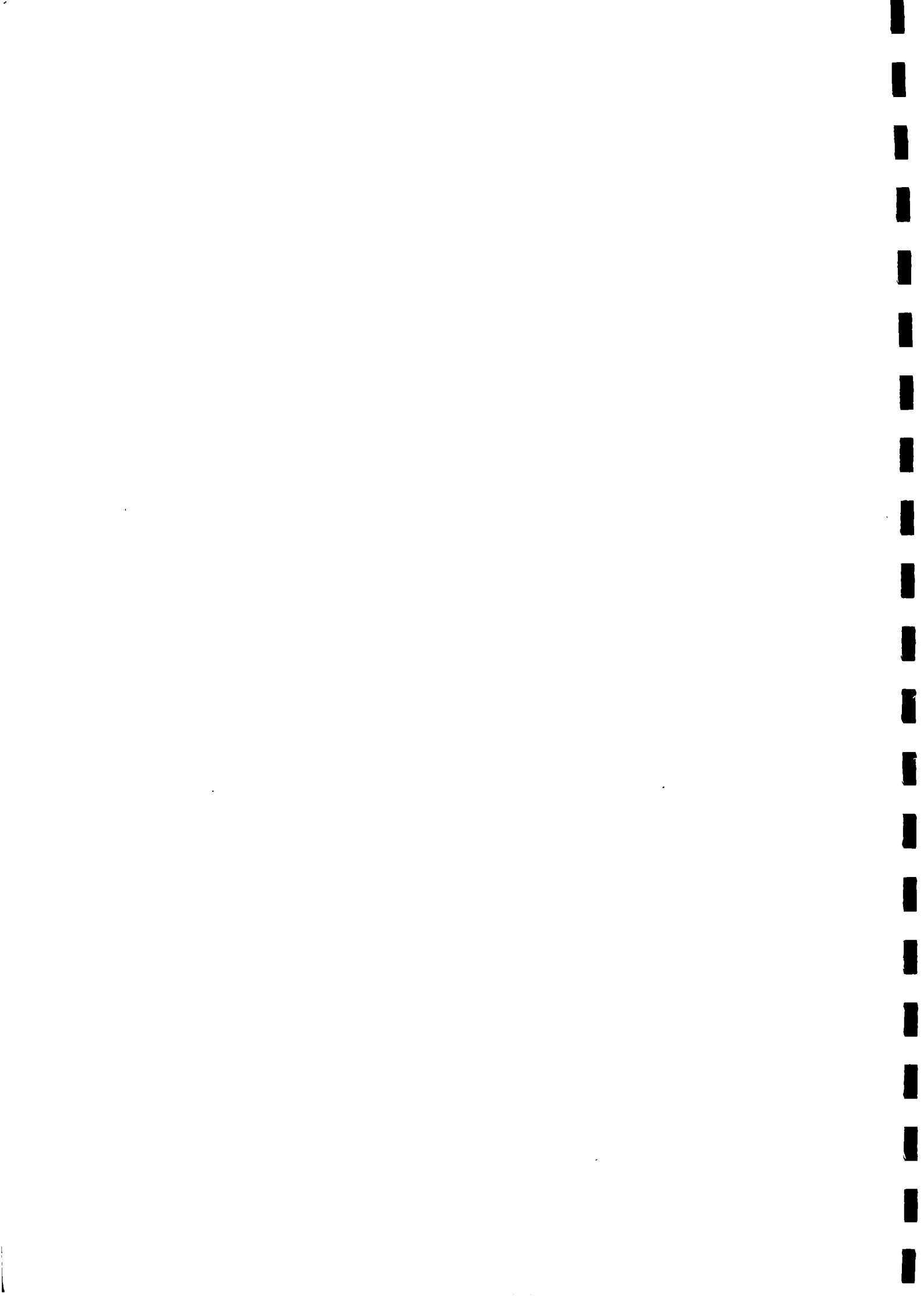


TABLE 3A: COST OF ADVOCACY AT PROVINCIAL/DISTRICT/COMMUNE
AND MOTIVATOR LEVEL, YEAR WISE

Amount in 000 dong

ACTIVITIES	Phase I			Phase II				Total cost Ph I and Ph II
	0-D,1992	J-D,1993	Total PhI	J-D,1994	J-D,1995	J-D,1996	Total PhII	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
NON RECURRING (Ref Table 3B) PROVINCIAL LEVEL								
A. Transport								
a. Advocacy van		156,880	156,880					156,880
b. Motorcycle	14,000		14,000					14,000
c. Fittings of Adv. van		22,400	22,400					22,400
B. A.V. equipments	43,240		43,240					43,240
C. Booklets, posters, leaflets		15,850	15,850					15,850
I. Development of advocacy materials and methods	4,000		4,000					4,000
J. Radio, T.V broadcasts	500	500	1,000	500	500		1,000	2,000
K. Press Publicity	500	500	1,000	500	500	500	1,500	2,500
L. Writing and printing of drama scrips and making video/audio cassettes		5,000	5,000	5,000			5,000	10,000
M. Documentation of events, activities and production of reports etc	1,000	2,000	3,000	1,000	1,000	1,000	3,000	6,000
Total	63,240	203,130	266,370	7,000	2,000	1,500	10,500	276,870

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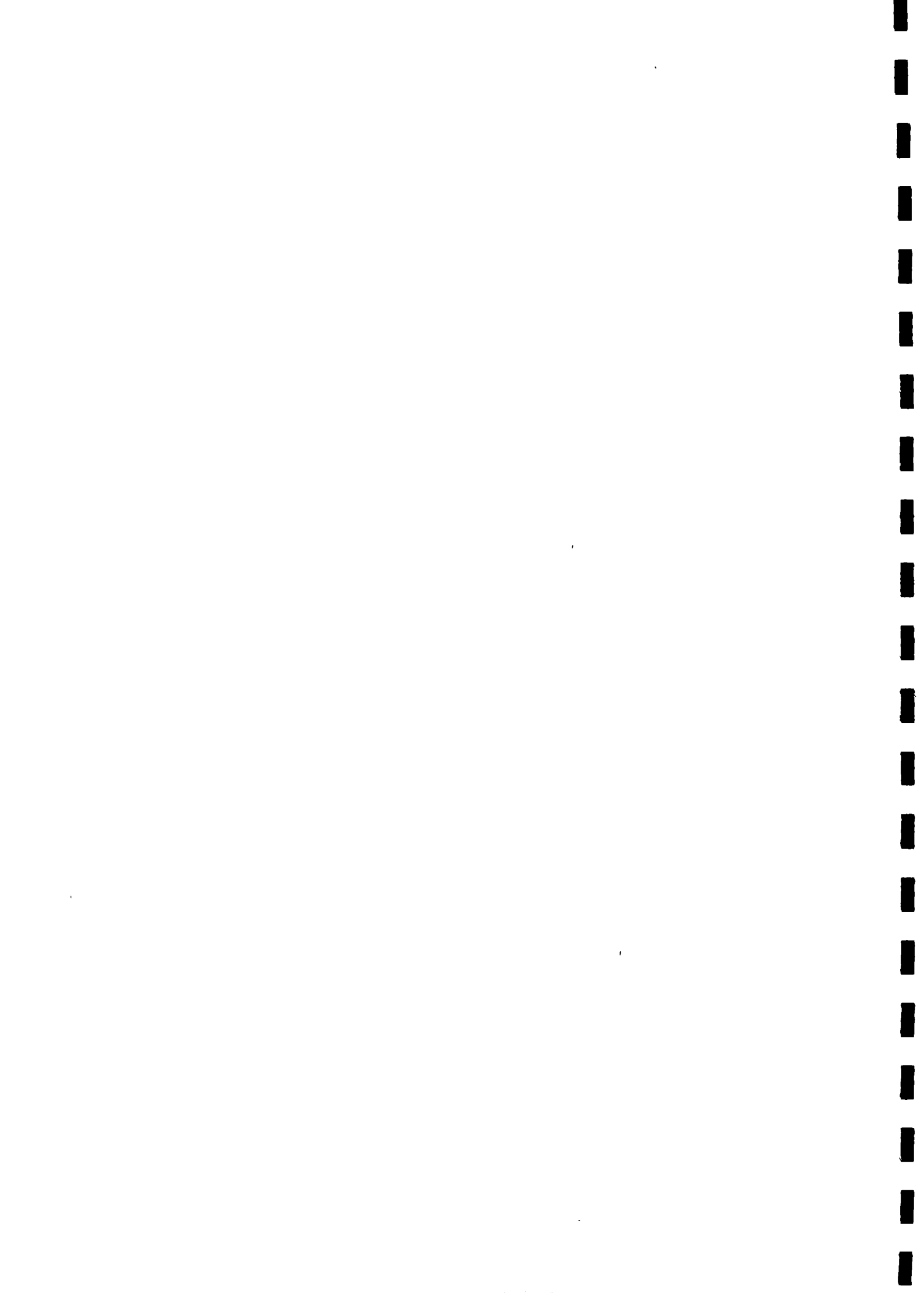
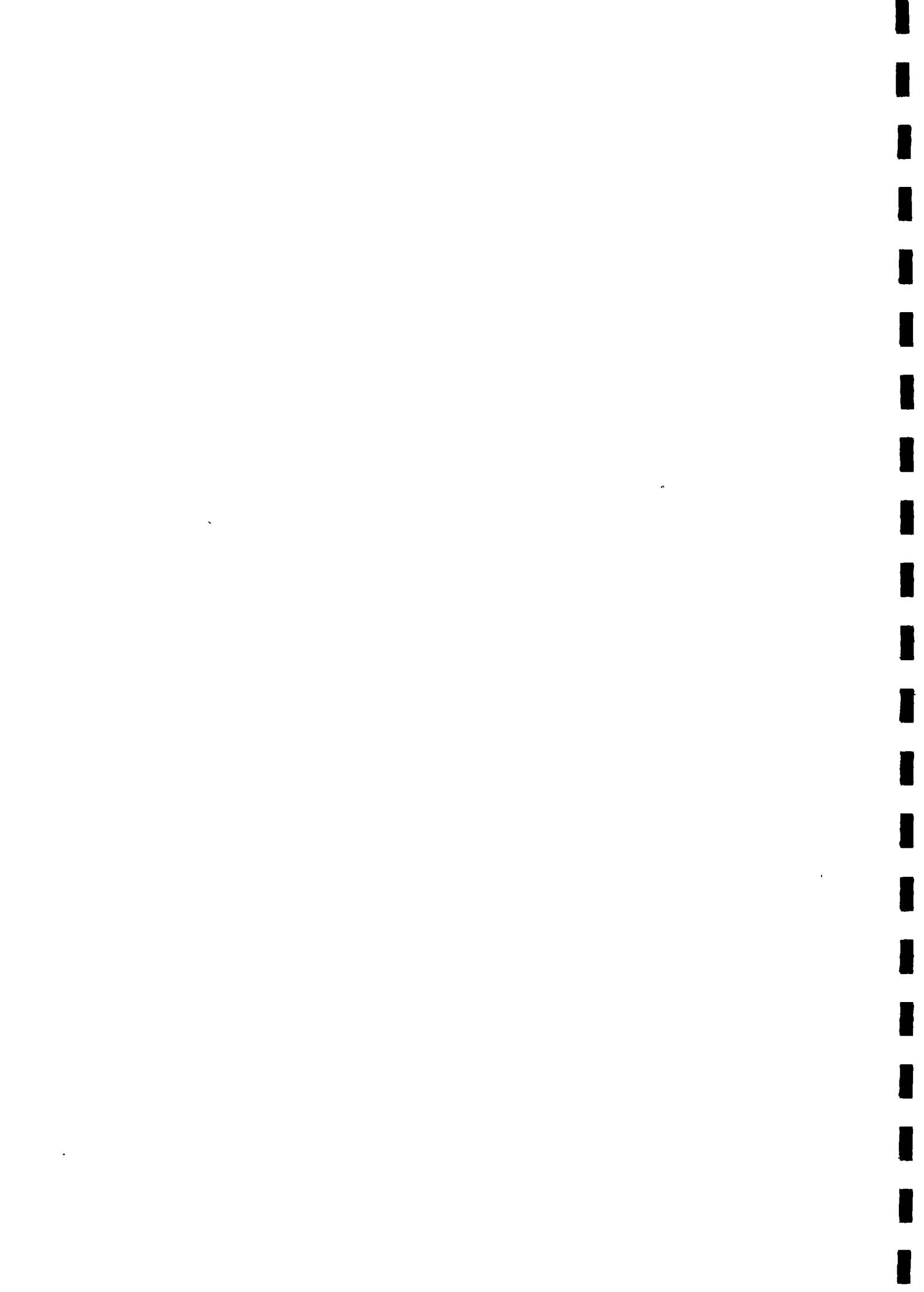


TABLE 3A (contd)

ACTIVITIES	Phase I			Phase II				Total cost Ph I and Ph II (9)
	O-D, 1992	J-D, 1993	Total Ph I	J-D, 1994	J-D, 1995	J-D, 1996	Total Ph II	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>DISTRRICT LEVEL</u>								
B. A.V. equipments	24,480		24,480					24,480
H. Sticker in vehicles/public places	100	100	200	400	400		800	1,000
Total	24,580	100	24,680	400	400		800	25,480
<u>COMMUNE LEVEL</u>								
A. Transport bicycles	1,160		1,160	20,970			20,970	22,130
D. Wall writing	60	50	110	1,800	1,800		3,600	3,710
F. Exhibitions in schools	40	80	120	600	600	280	1,480	1,600
G. Sanitation night show with video van		1,600	1,600	7,000	7,000	3,000	17,000	18,600
Total	1,260	1,730	2,990	30,370	9,400	3,280	43,050	46,040
<u>MOTIVATOR LEVEL</u>								
E. Motivator's kit	240		240	3,000	1,560		4,560	4,800
Total Non-Recurring	89,320	204,960	294,280	40,770	13,360	4,780	58,910	353,190
<u>RECURRING (Ref. Table 3C)</u>								
PROVINCIAL LEVEL	3,000	12,000	15,000	12,000	12,000	12,000	36,000	51,000
DISTRRICT LEVEL	120	480	600	480	480	480	1,440	2,040
COMMUNE LEVEL	30	120	150	4,440	4,440	4,440	13,320	13,470
Total Recurring	3,150	12,600	15,750	16,920	16,920	16,920	50,760	66,510
Total Non-Recurring and Recurring	92,470	217,560	310,030	57,690	30,280	21,700	109,670	419,700



**TABLE 3B: DETAILS OF COST FOR AUDIO VISUAL EQUIPMENTS
MATERIALS AND ACTIVITIES (NON-RECURRING)**

Amount in 000 dong

Advocacy materials and activities	Provincial level	District level	Commune level	Motivator level	Total cost
A. Transport					
a. Advocacy van with covered body	(1) 156,800				156,800
b. Motorcycle	(1) 14,000				14,000
c. Bicycle			(38) 22,130		22,130
d. Advocacy van, internal fittings, fixings and modifications	22,400				22,400
B. Audio-visual equipments					
a. Microphone with battery	(1) 1,180	(1) 1,180			2,360
b. Video camera	(1) 13,440				13,440
c. Tape recorder	(1) 1,680	(1) 1,680			3,360
d. Portable generator	(1) 5,600	(1) 5,600			11,200
e. Video recorder	(1) 5,380				5,380
f. Video player		(1) 4,150			4,150
g. Blank audio cassette	(10) 170	(40) 670			840
h. Blank video cassette	(10) 1,570				1,570
i. Camera reel	(20) 670				670
j. Cameral reel (for slides)	(20) 670				670
k. T.V	(1) 11,200	(1) 11,200			22,400
l. Slide projector	(1) 1,680				1,680
C. Booklets, posters, leaflets					
a. Flip chart (set of 6 and one booklet) for motivators @ 4000 d per set	(20) 200	(20) 200	(40) 400	(420) 4,200	5,000
b. Posters (set of 5) for motivators @ 4000 d per set	(20) 80	(20) 80	(40) 160	(420) 1,680	2,000
c. Leaflets on health education, sanitation for distribution to households @ 100 d per each				(40,000) 4,000	4,000
d. Baseline data form for households (information before and after implementation) @ 100 d per each			(4000) 400		400
e. Village information from @ 100 d per each			(500) 50		50
f. Instruction for use and maintenance of facilities @ 200 d per each				(22,000) 4,400	4,400

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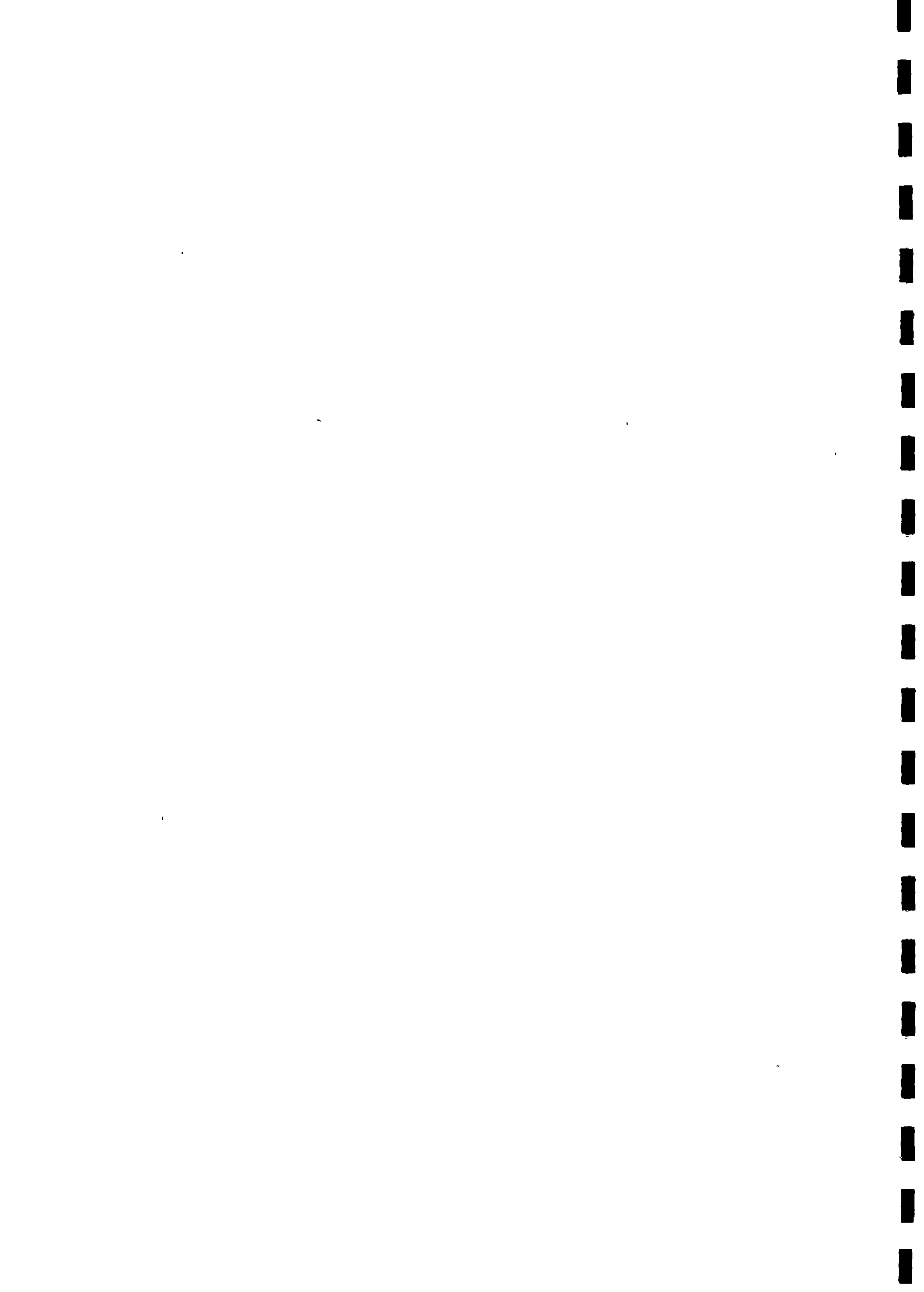


TABLE 3B (contd)

Advocacy materials and activities	Provincial level	District level	Commune level	Motivator level	Total cost
D. Wall writing, one in each village @ 10,000 d per each			(371) 3,710		3,710
E. Motivator's kit @ 12,000 d per kit				(400) 4,800	4,800
F. Exhibitions in schools @ 40,000 d per exhibition			(40) 1,600		1,600
G. Sanitation night show in village with video van, drama/song group, puppet show etc @ 100,000 d per show			(186) 18,600		18,600
H. Sticker in vehicles/ public places		1,000			1,000
I. Development of advocacy materials and methods through puppet groups/ other local experts/ consultancy	4,000				4,000
J. Radio/TV broadcasts	2,000				2,000
K. Press publicity through local periodicals/ newspapers	2,500				2,500
L. Writing drama scrips and songs, staging the same and making video/audio cassettes for distribution	10,000				10,000
M. Regular documentation of events, activities of the project, editing and production of video films on the projects, writing and printing of booklets, reports, etc	6,000				6,000
Total	261,220	25,760	47,050	19,080	353,110

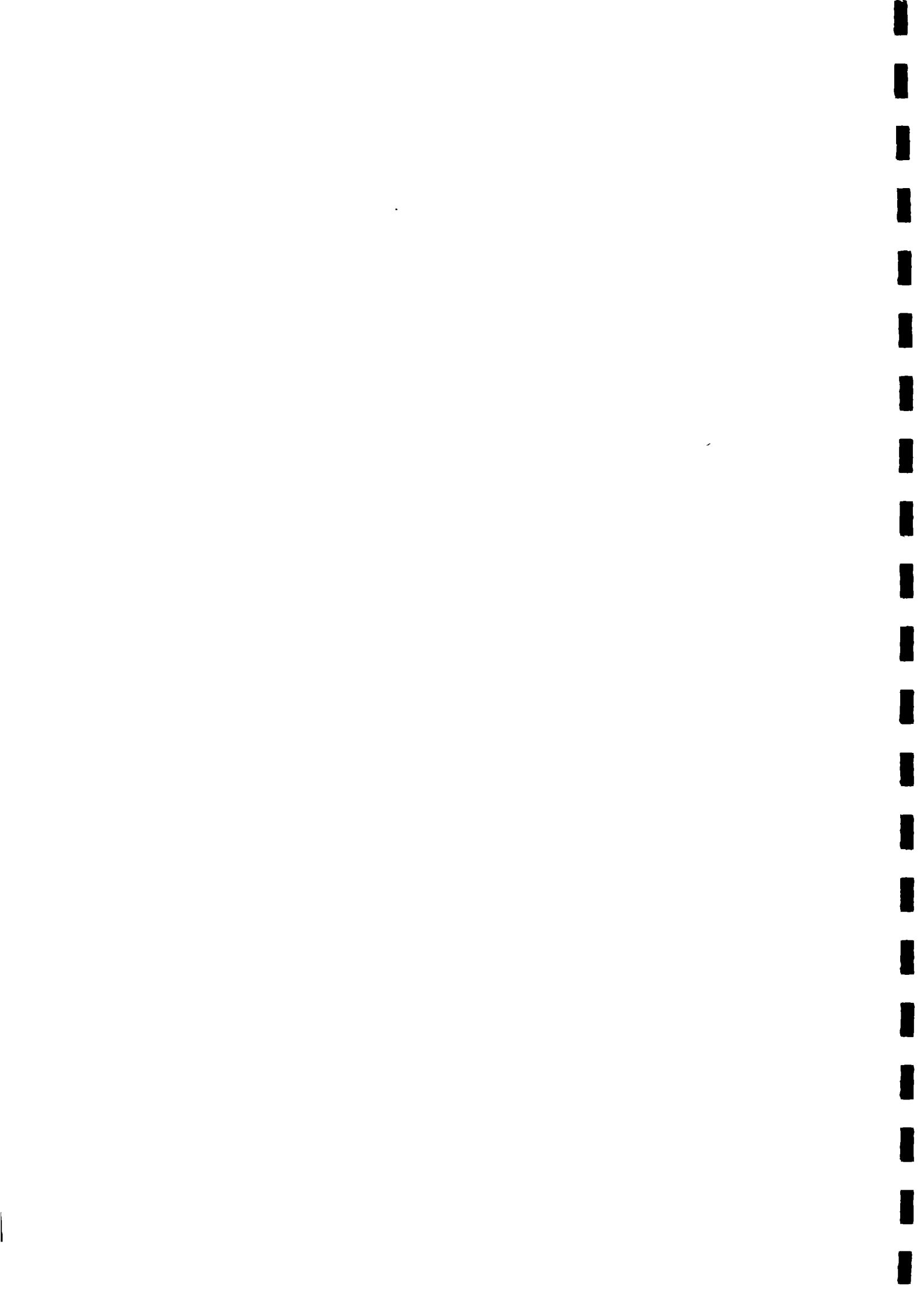


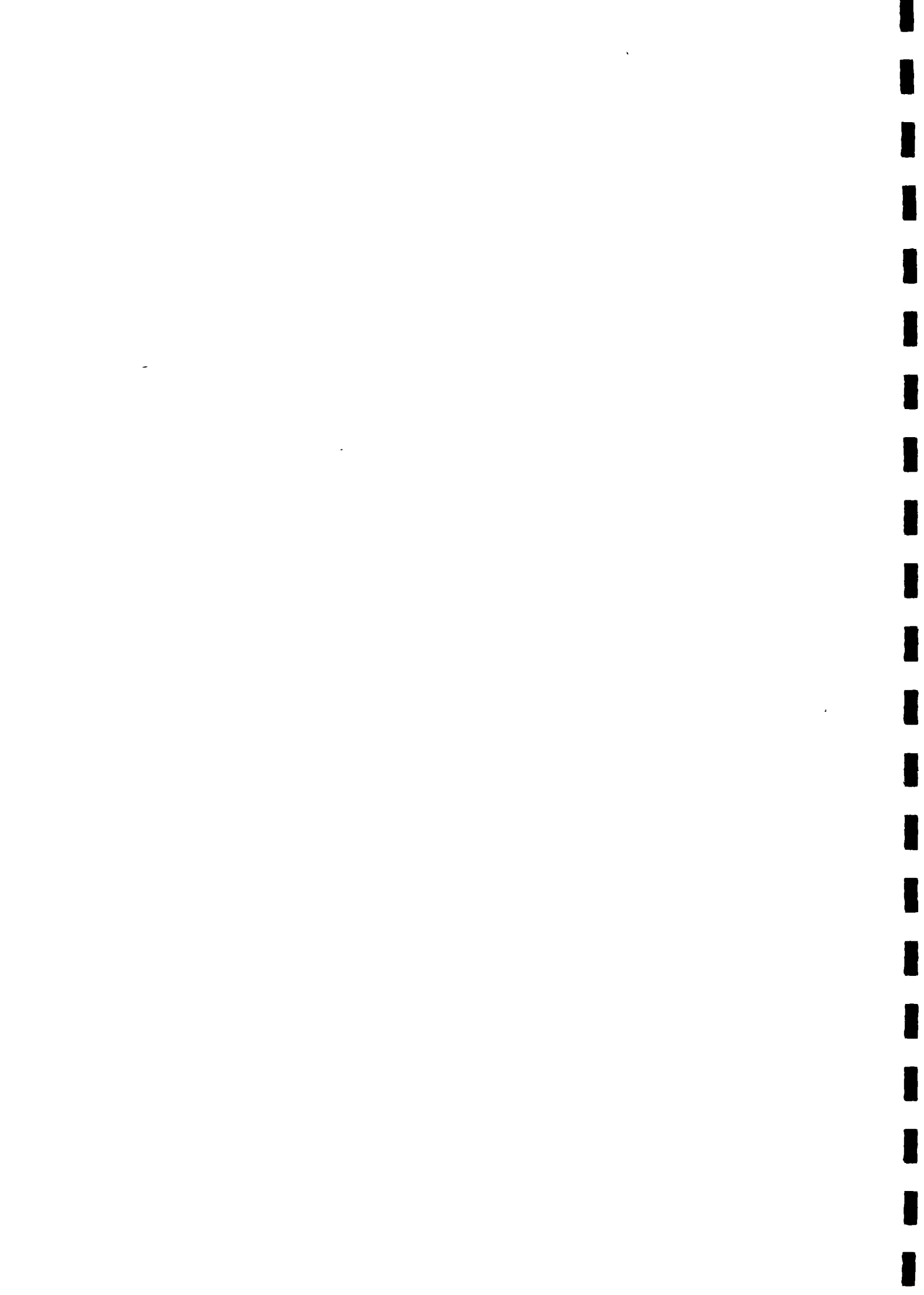
TABLE 3C: DETAILS OF RECURRING EXPENDITURE ON ADVOCACY

Amount in 000 dong

Staff and details		Amount per year
A. Provincial level		
Project officer (communication)	(1) @ 200 p.m	2,400
Technician	(1) @ 200 p.m	2,400
Driver	(1) @ 200 p.m	2,400
Contingency	@ 100 p.m	1,200
POL and repair of vehicle	@ 300 p.m	3,600

	Total	12,000
B. District level		
Contingency	@ 40 p.m	480
C. Commune level		
Contingency	@ 10 per month per commune	
	Phase I- 1 commune	120
	Phase II- 37 communes	4,440

	Total per year Phase I	12,600
	Total per year Phase II	16,920



**TABLE 4A: COST OF TRAININGS, ORIENTATIONS AND MEETINGS AT
PROVINCIAL, DISTRICT AND COMMUNE LEVEL, YEAR WISE**

Amount in 000 dong

Activities	Phase I			Phase II				Total cost Phase I and Phase II	Remarks
	O-D 1992	J-D 1993	Total Phase I	J-D 1994	J-D 1995	J-D 1996	Total Phase II		
(Refer Table 4B for details)									
a. Provincial level meeting (2)	400		400	400			400	800	(1) at the beginning of PhI, (1) at the beginning of PhII
b. District level meeting (2)	500		500	500			500	1,000	(1) at the beginning of PhI, (1) at the beginning of PhII
c. Orientation and training of all project personnel (1)	1,800		1,800					1,800	(1) at the beginning of PhI
d. Orientation of commune functionaries (38)	300		300	6,000	5,100		11,100	11,400	(1) at the beginning of PhI, (20) at the beginning of Ph II (17) at the beginning of 2nd year of Ph II
e. Meeting with press (5)	400	400	800	400	400	400	1,200	2,000	(1) at the beginning of Ph I, (1) at the end of Ph I, (3) at the end of each year of Ph II
f. Trainers' training (1)	3,000		3,000					3,000	(1) at the beginning of Ph I
g. Training of village masons and motivators (38)	1,820		1,820	36,400	30,940		67,340	69,160	(1) at the beginning of Ph I, (20) at the beginning of Ph II (17) at the beginning of 2nd year of Ph II
h. Meeting for feedback/evaluation (4)		1,350	1,350	1,350	1,350	1,350	4,050	5,400	(1) at the end of Ph I, (1) at the end of each year of Ph II
i. Village level group meeting (300)	200	400	600	20000	20000	19400	59,400	60,000	(3) during Ph I (297) during Ph II
j. Working drawings	300		300	1,500	1,200		2,700	3,000	
k. Tool kits	150		150	600	450		1,050	1,200	
Total	8,870	2,150	11020	67,150	59,440	21150	147740	158,760	

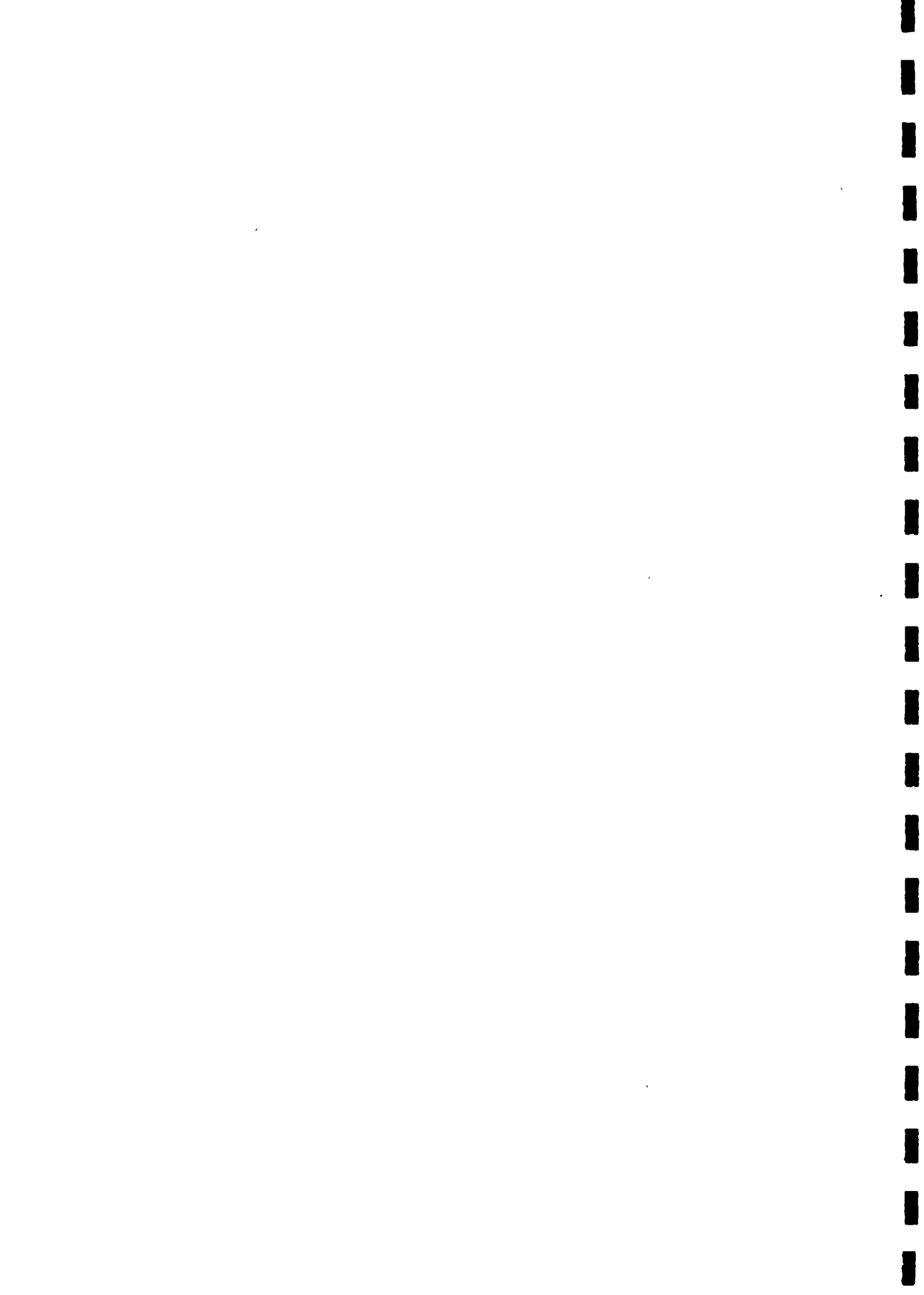


TABLE 4B: DETAILS OF TRAINING/ORIENTATIONS/MEETINGS

Orientation/ training course and duration	Objective	Participants from (number)	Total Parti- cipants per course	Number of courses	Cost per partipant per day (dong)	Total cost (in 000 dong)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
a. Provincial level meeting (1 day)	Sensitization about ISP; seek support and cooperation	MOH(2), CHE(3), TBMC(3), PWU(3), PPC(5), PHOD(4)	20	2	20,000	800
b. District level meeting (1 day)	Sensitization about ISP; seek support and cooperation	MOH(2), CHE(2), TBMC(2), PWU(1), PPC(1), PHOD(3), DPC(8), DWU(2), DHOD(3), CPC(2)	25	2	20,000	1,000
c. Orientation and training of all project personnel (3 days)	Orientation about ISP; delegation of functions and responsibilities; planning/ scheduling activities & fund; routing of fund, materials, reporting; timing of regular meetings; submission of accounts; duration of field visits etc	MOH(3), CHE(5), TBMC(5), PWU(1), PPC(1), PHOD(2), DWU(4), DPC(2), DHOD(3), CPC(2), CWU(2)	30	1	20,000	1,800
d. Orientation of commune functionaries (1 day)	Orientation about ISP; responsibility for advocacy; planning/ scheduling implementation; seek cooperation & support	CHE(1), TBMC(1), DPC(1), DWU(1), POC(1), CPC(10), CWU/motivators (15)	30	38	10,000	11,400
e. Meeting with press (1 day)	Orient press/ publicity officials about ISP, inform proposed targets/ achievements for the year/ next year; motivate for wide publicity; answer questions	CHE(1), TBMC(1), PPC(1), PWU(1), DPC(1), DWU(1), Press/Radio/ Television (14)	20	5	20,000	2,000
f. Trainers' training for seed mason, project officials and other functionaries (10 days)	Construct each of the facilities to be covered under the package from start to end; record quantity of materials, labour and time used; understand proportion and methodology of work; prepare dimentioned drawing for each facility; work out actual costs of each facility with different combinations; ascertain tools and infrastructure required for mass production of selected items. (Plan full set of items to be constructed and the best place for demonstration and preservation, prior to the training).	Proj. Coordinator (1), Proj. Officers (4) Seed mason(1) Other mason(2) Dist. Proj. Secretary(1) Com. Proj. Secretary(1) CHE (1) TBMC (1) DPC (1) DWU (1) Expert (1)	15	1	20,000	3,000

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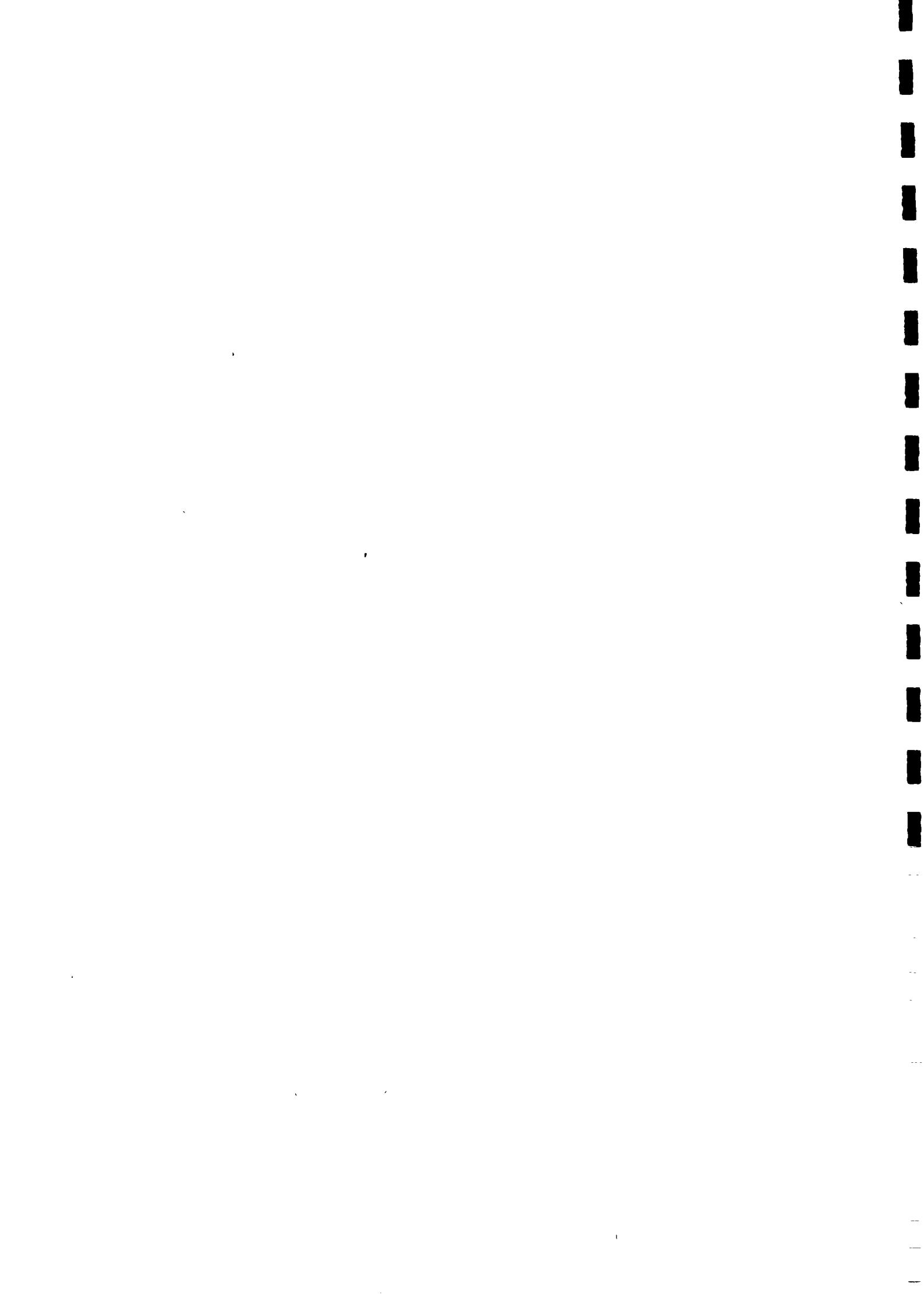


TABLE 4B (contd)

Orientation/ training course and duration	Objective	Participants from (number)	Total Parti- cipants per course	Number of courses	Cost per partipant per day (dong)	Total cost (in 000 dong)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
g. Training of village masons and motivators (7 days)	Construct a full set of sanitation facilities as a package; learn about measurements, method of construction, proportion, quantity of materials, labour and costs; follow the set of drawings; instructions for use and maintenance; method of advocacy/ motivation; responsibilities after training.	PO (tech) (1) Seed mason (1) PO (com.) (1) PO (Imp) (1) Village mason (10) Village motivator (10) PC Secretary (1) PWU Secretary (1)	26	38	10,000	69,160
h. Meeting for feedback/ evaluation (2 days)	Report on annual achievement against targets; acceptability, use, maintenance and demand; suggestions for improvements/ modifications; materials received, used and in stock; fund received, utilized, loan recovered; annual accounts report; planning targets, materials and fund for next year, etc. (Evaluation data sheet and formats for annual accounts, annual report to be sent to PWU Secretary prior to the training)	CHE (1) TBMC (1) DPC (1) DWU (1) CWU Sec. (38) Observers PPC (1) PWC (1) MOH (1)	45	4	15,000	5,400
i. Village level group meeting (1/2 day)	To sensitize/motivate the villages to accept facilities offered by ISP; discuss problems, doubts, acceptability, use, maintenance; inform about costs and loan; encourage participation, cooperation.	Trained motivator (3) Trained mason(2) CPC (1) CWU (1) Village women (15) Village functionaries(8) Potential beneficiaries (10)	40	300	5,000	60,000
j. Preparation of working drawings with dimensions, specifications etc and printing	Making available set of drawing to communes, masons and motivators.	-	-	1,000 sets	3,000 per set	3,000
k. Carry bag, measuring tape and tools for masons and tape for motivators		-	-	400 sets	3,000 per set	1,200

Abb: MOH Ministry of Health
 CHE Centre for Hygiene and Epidemiology
 WSRC, TBMC WATSAN Reference Centre, Thai Binh Medical College
 PPC Provincial Peoples Committee
 PWC Provincial Women's Union
 PHOD Provincial Head of Department
 DPC District People's Committee
 DWU District Women's Union
 DHOD District Head of Department
 CPC Commune People's Committee
 CWU Commune Women's Union
 PC Project Coordinator
 PO (comm) Project Officer (Communication)
 PO (Tech) Project Officer (Technical)
 PO (Imp) Project Officer (Implementation)

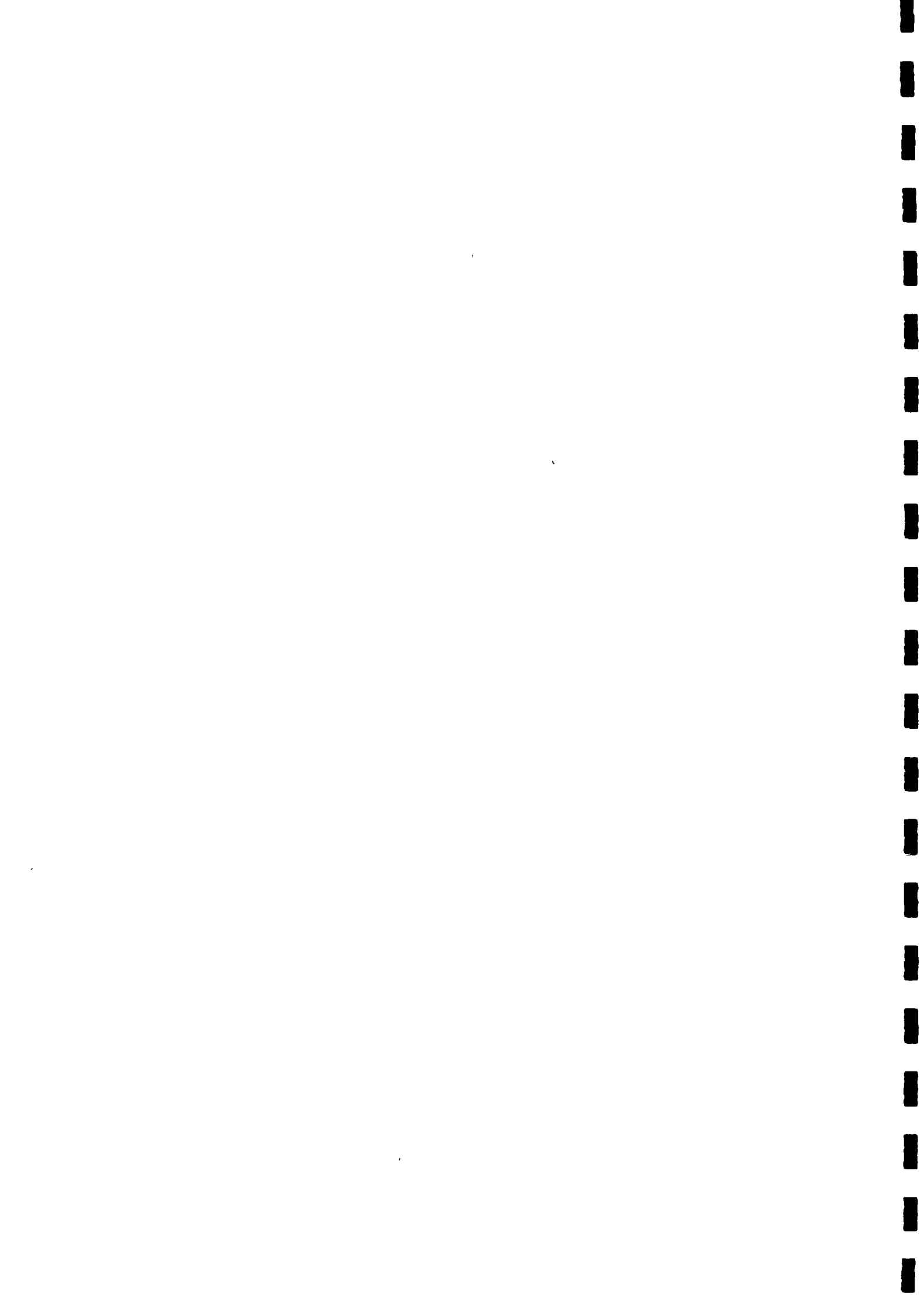


TABLE 4C: NUMBER OF PERSONNEL TO BE TRAINED/ORIENTED

Categories of personnel trained/oriented/discussed	Number of trainings/ orientations/meetings	Total number of persons trained/ oriented
(1)	(2)	(3)
1. Motivators		38 x 10 = 380
2. Masons	38 trainings	38 x 10 = 380
3. Commune Secretary		38 x 2 = 76
4. Project personnel	1 trainer's training 1 orientation	1 x 15 = 30 1 x 30 = 30
5. Provincial functionaries	2 orientations	2 x 20 = 40
6. District functionaries	2 orientations	2 x 25 = 50
7. Commune functionaries	38 orientations	38 x 30 = 1,140
8. Project functionaries of commune/district	4 feedback/ evaluation meeting	4 x 45 = 180
9. Press/publicity officials	5 meetings	5 x 20 = 100
10. Villagers/ beneficiaries	300 meetings	300 x 40 = 12,000

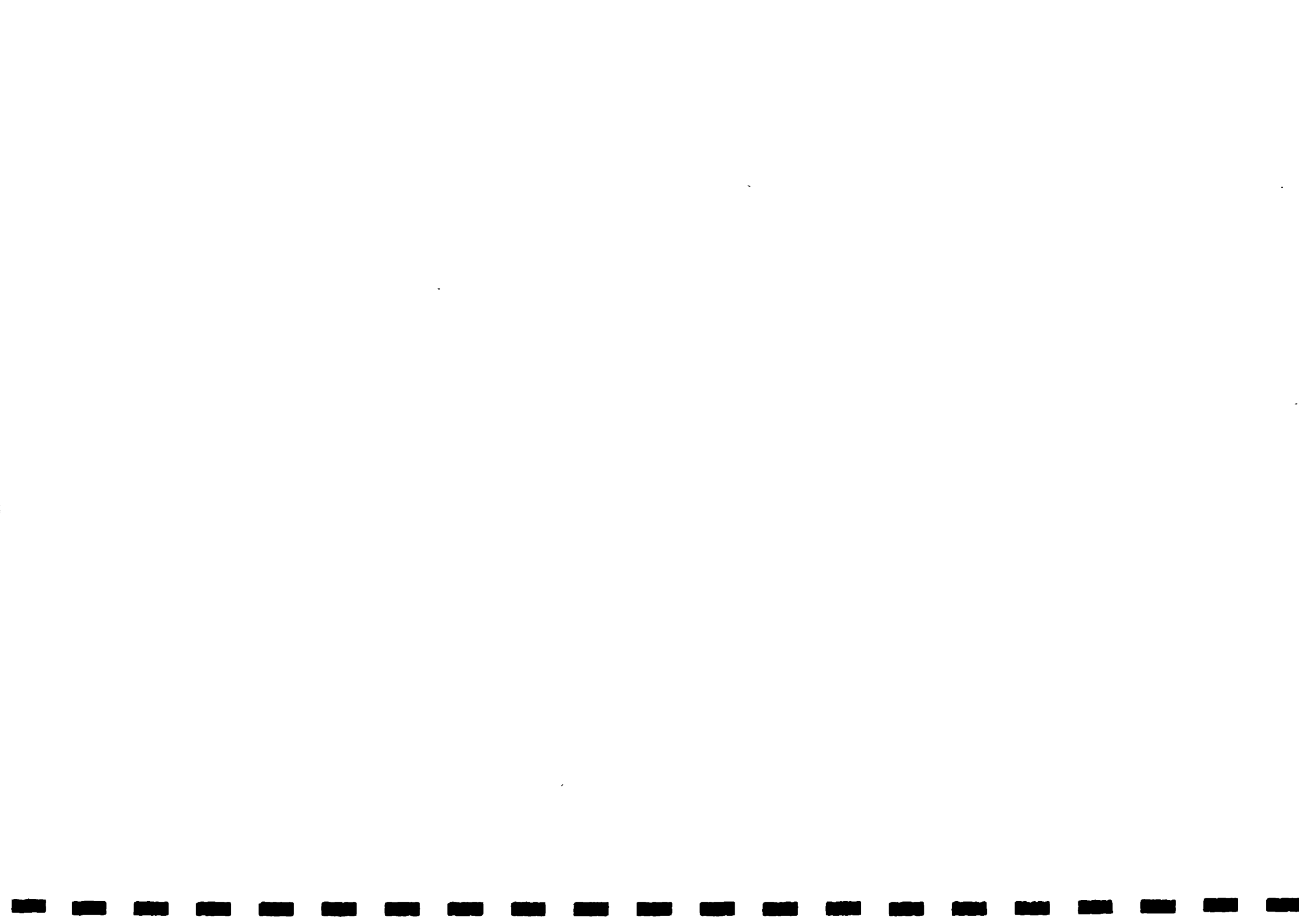


TABLE 5A: COST OF CONSTRUCTION OF SANITARY FACILITIES, YEARWISE

Amount in 000 dong

Item	Unit cost	Phase I					Phase II						Total cost of Phase I and Phase II	
		O-D 1992		J-D 1993		Total cost of Phase I	J-D 1994		J-D 1995		J-D 1996			Total cost of Phase II
		No of unit	Total cost	No of unit	Total cost		No of unit	Total cost	No of unit	Total cost	No of unit	Total cost		
(Refer table 5B for data and unit costs)														
1. Low cost water seal latrine														
a. 2 pit	196	60	11,760	200	39,200	50,960	2,200	431,200	2,960	580,160	2,800	548,800	1,560,160	1,611,120
b. 1 pit	94	90	8,460	300	28,200	36,660	3,300	310,200	4,440	417,360	4,200	394,800	1,122,360	1,159,020
2. Bathing platform	33	120	3,960	400	13,200	17,160	4,400	145,200	5,920	195,360	5,600	184,800	525,360	542,520
3. Soakage pit	33	75	2,480	250	8,250	10,730	2,750	90,750	3,700	122,100	3,500	115,500	328,350	339,080
4. Garbage pit	11	75	830	250	2,750	3,580	2,750	30,250	3,700	40,700	3,500	38,500	109,450	113,030
5. Smokeless chula	22	75	1,650	250	5,500	7,150	2,750	60,500	3,700	81,400	3,500	77,000	218,900	226,050
6. Animal shed (Av)	73	15	1,100	50	3,650	4,750	550	40,150	740	54,020	700	51,100	145,270	150,020
7. Vector control	22	45	990	150	3,300	4,290	1,650	36,300	2,220	48,840	2,100	46,200	131,340	135,630
8. Water treatment tank	55	45	2,480	150	8,250	10,730	1,650	90,750	2,220	122,100	2,100	115,500	328,350	339,080
Total			33,710		112,300	146,010		1,235,300		1,662,040		1,572,200	4,469,540	4,615,550
9. Moulds, tools and infrastructure for mass production	1000	1	1,000			1,000	20	20,000	17	17,000			37,000	38,000
10. Full set of demonstration units one in each commune	1500	1	1,500			1,500	20	30,000	17	25,500			55,500	57,000
11. Running capital for mass production per commune	11200	1	11,200			11,200	20	224,000	17	190,400			414,400	425,600
Total (item 9, 10 and 11)			13,700			13,700		274,000		232,900			506,900	520,600
Grand total (item 1-11)			47,410		112,300	159,710		1,509,300		1,894,940		1,572,200	4,976,410	5,136,150

Note: Item 9, 10 and 11 are one-time investments for capacity building and demonstration and the costs would not be recovered from the beneficiaries.



TABLE 5B: AVERAGE ESTIMATED COST OF LATRINE AND OTHER SANITARY FACILITIES PER UNIT

Amount in 000 dong

No.	Item	Construction cost (material, labour, carriage) per unit	Service charges for infrastructure management (10% per unit)	Total selling/delivery cost per unit (approximate)
1.	Low cost water seal latrines			
	a. 2 pit with brick and superstructure made of brick	220	22	242
	b. 2 pit with brick without superstructure	120	12	132
	c. 2 pit with concrete ring with superstructure made of brick	240	24	254
	d. 2 pit with concrete ring without superstructure	140	14	154
	e. 2 pit with earthen ring with superstructure made of brick	130	13	143
	f. 2 pit with earthen ring without superstructure	50	5	55
	g. One pit with brick	100	10	110
	h. One pit with concrete ring	110	11	121
	i. One pit with earthen ring	90	9	99
	j. Concrete slab with pan and trap fitted	70	7	77
2.	Bathing/urinal platform (1m.1m)	30	3	33
3.	Soakage pit (1m.1m.1m)	30	3	33
4.	Garbage pit (1m.1m.1m)	10	1	11
5.	Animal shed with waste disposal arrangement			
	a. For pig	100	10	110
	b. For cow	80	8	88
	c. Other	20	2	22
6.	Vector control	20	2	22
7.	Smokeless chula	20	2	22
8.	Water treatment tanks	50	5	55
9.	Infrastructure for mass production	1000		
10.	Full set of demonstration unit - one set in each commune	1640		

(cont)

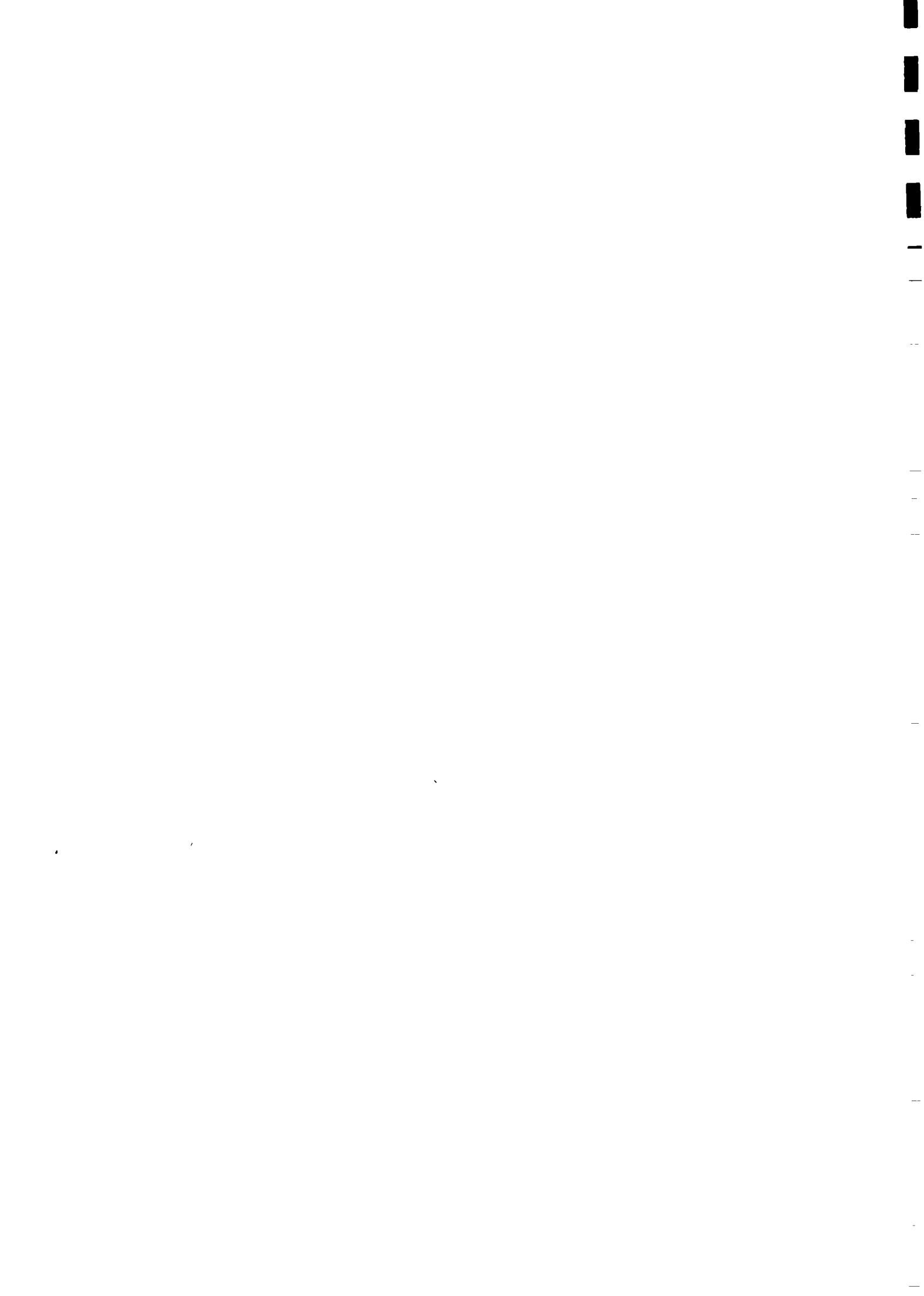


TABLE 5B (contd)

Note: For the purpose of estimating the requirement of fund for construction,

1. It is assumed that for each 10 units of latrines built, 4 units would be of 2 pit and 6 units would be of single pit, as follows:

<u>2 pit</u>	1 unit with brick pit with superstructure	242 (a)
	1 unit with brick pit without superstructure	132 (b)
	1 unit with concrete ring with superstructure	254 (c)
	1 unit with concrete ring without superstructure	154 (d)

	Total	782
	Average cost per unit =	782/4 = 196
<u>1 pit</u>	3 units with concrete slab	231 (j)
	1 unit with concrete ring	121 (h)
	1 unit with brick	110 (g)
	1 unit with earthen ring	99 (i)

	Total	561
	Average cost per unit =	561/6 = 94

2. It is assumed that out of the households who have accepted latrines, it would be possible to motivate the following percentages to accept other facilities:

Bathing platform	80%
Soakage pit	50%
Garbage pit	50%
Smokeless chula	50%
Vector control	30%
Water treatment	30%
Animal shed	10%

3. The amount of service charges will be earned only on the items which are constructed by the implementing agency and on components manufactured and sold to beneficiaries. The materials and labour supplied by the beneficiaries will not fetch 10% service charge.

Assuming that 50% of the cost of the facilities, might be borne by the beneficiaries themselves by way of providing some materials and labour, only 50% of the total investments on the above items of construction may earn the 10% service charge. This may amount to 230,777 thousand dong (50% of 4,615,550 thousand dong, column 2, Table 8).

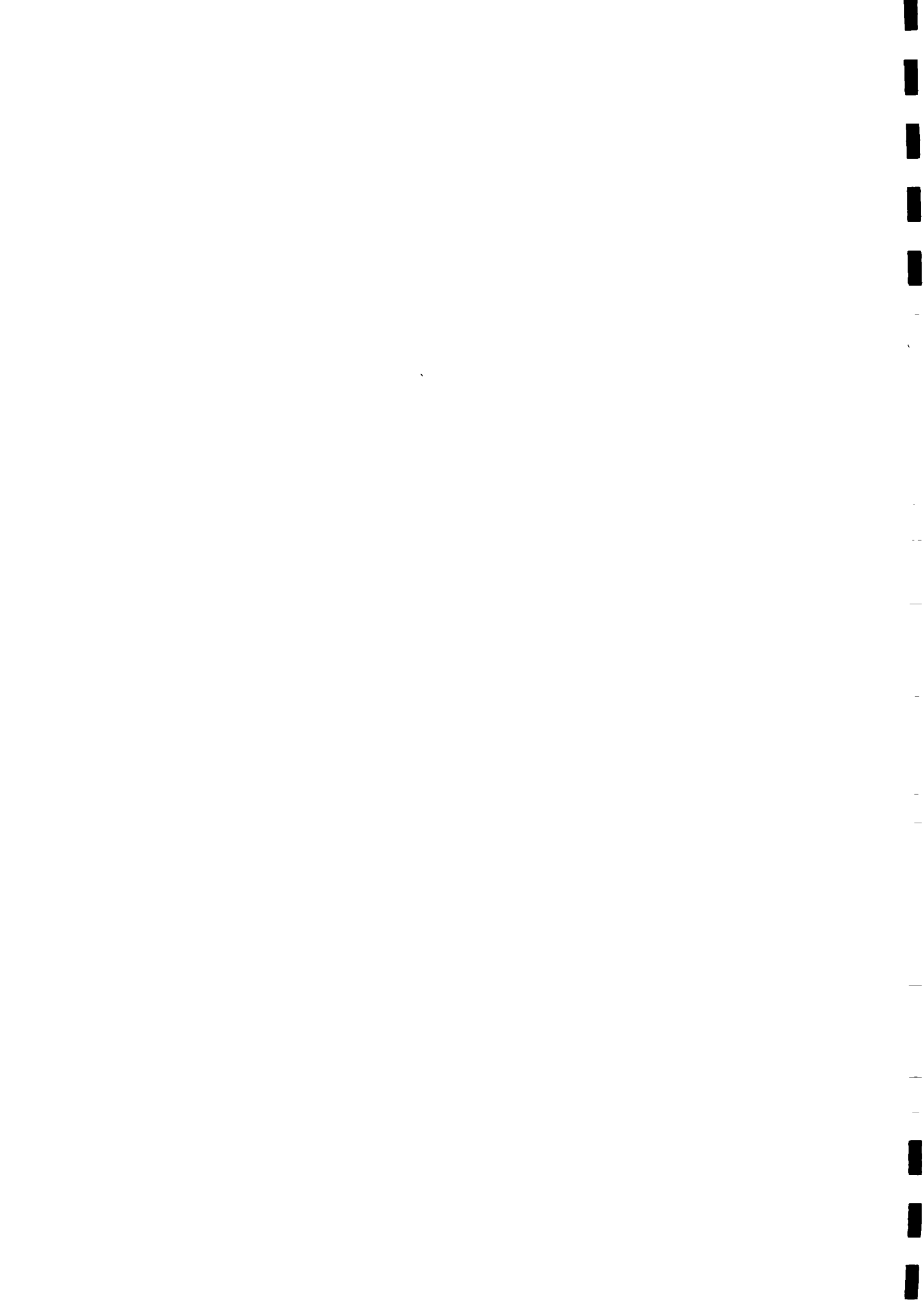
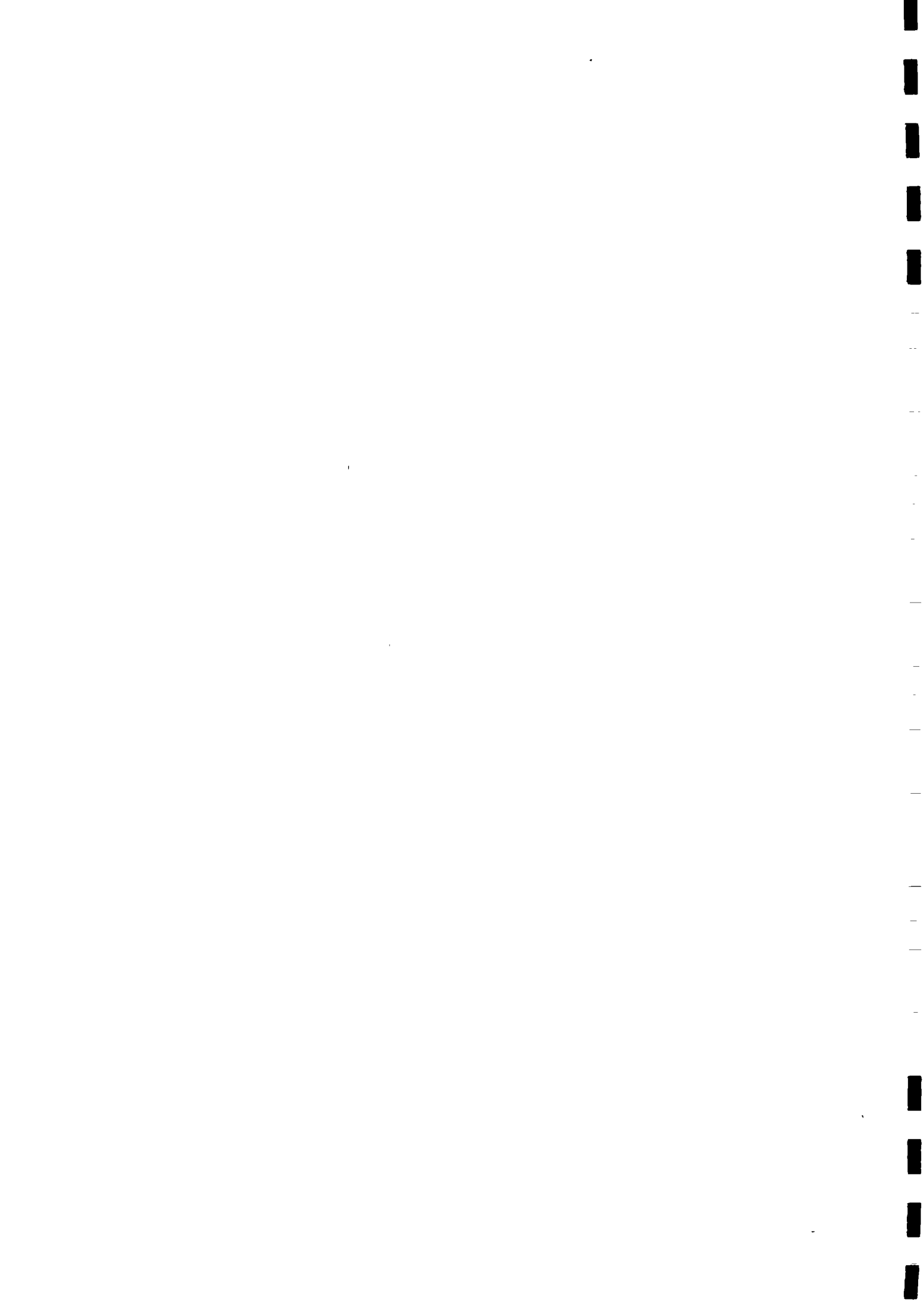


TABLE 5C: CONSTRUCTION LOAD PER COMMUNE/MOTIVATOR, YEARWISE

Item	Phase I						Phase II								
	0-D 1992			J-D 1993			J-D 1994			J-D 1995			J-D 1996		
	Total unit	Units per		Total units	Units per		Total units	Units per		Total units	Units per		Total units	Units per	
		C	M		C	M		C	M		C	M		C	M
a. Low cost water seal latrine	150	150	15	500	500	50	5,500	280	28	7,400	200	20	7,000	190	19
b. Bathing platform	120	120	12	400	400	40	4,400	220	22	5,920	160	16	5,600	152	16
c. Soakage pit	75	75	8	250	250	25	2,750	138	14	3,700	100	10	3,500	95	10
d. Garbage pit	75	75	8	250	250	25	2,750	138	14	3,700	100	10	3,500	95	10
e. Smokeless chula	75	75	8	250	250	25	2,750	138	14	3,700	100	10	3,500	95	10
f. Animal shed	15	15	2	50	50	5	550	28	3	740	20	2	700	19	2
g. Vector control	45	45	5	150	150	15	1,650	83	9	2,220	60	6	2,100	57	6
h. Water treatment tank	45	45	5	150	150	15	1,650	83	9	2,220	60	6	2,100	57	6

- Note:
1. Refer table 2 for number of low cost latrine units and table 5B (Note 2) for other sanitary facilities, to be constructed per year
 2. Assumed a minimum of 20 communes and $20 \times 10 = 200$ motivators will work during 1994 and 37 communes and motivators ($37 \times 10 = 370$) would continue implementation in 1995 and 1996.

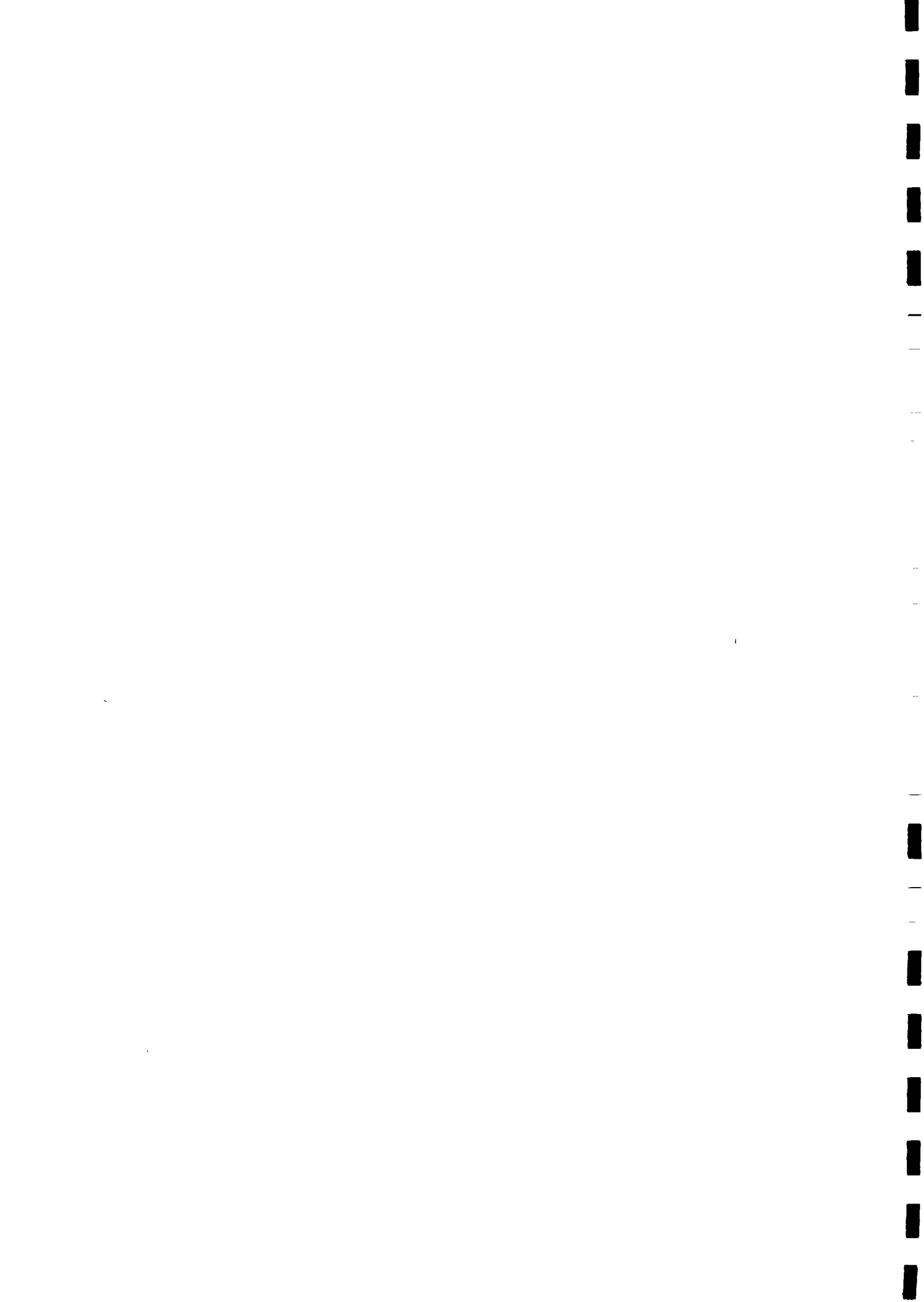
Abb: C = Commune
M = Motivator



**TABLE 6A: COST OF ADMINISTRATION AND ESTABLISHMENT
FOR PROJECT IMPLEMENTATION AT PROVINCIAL
DISTRICT AND COMMUNE LEVEL, YEARWISE**

Amount in 000 dong

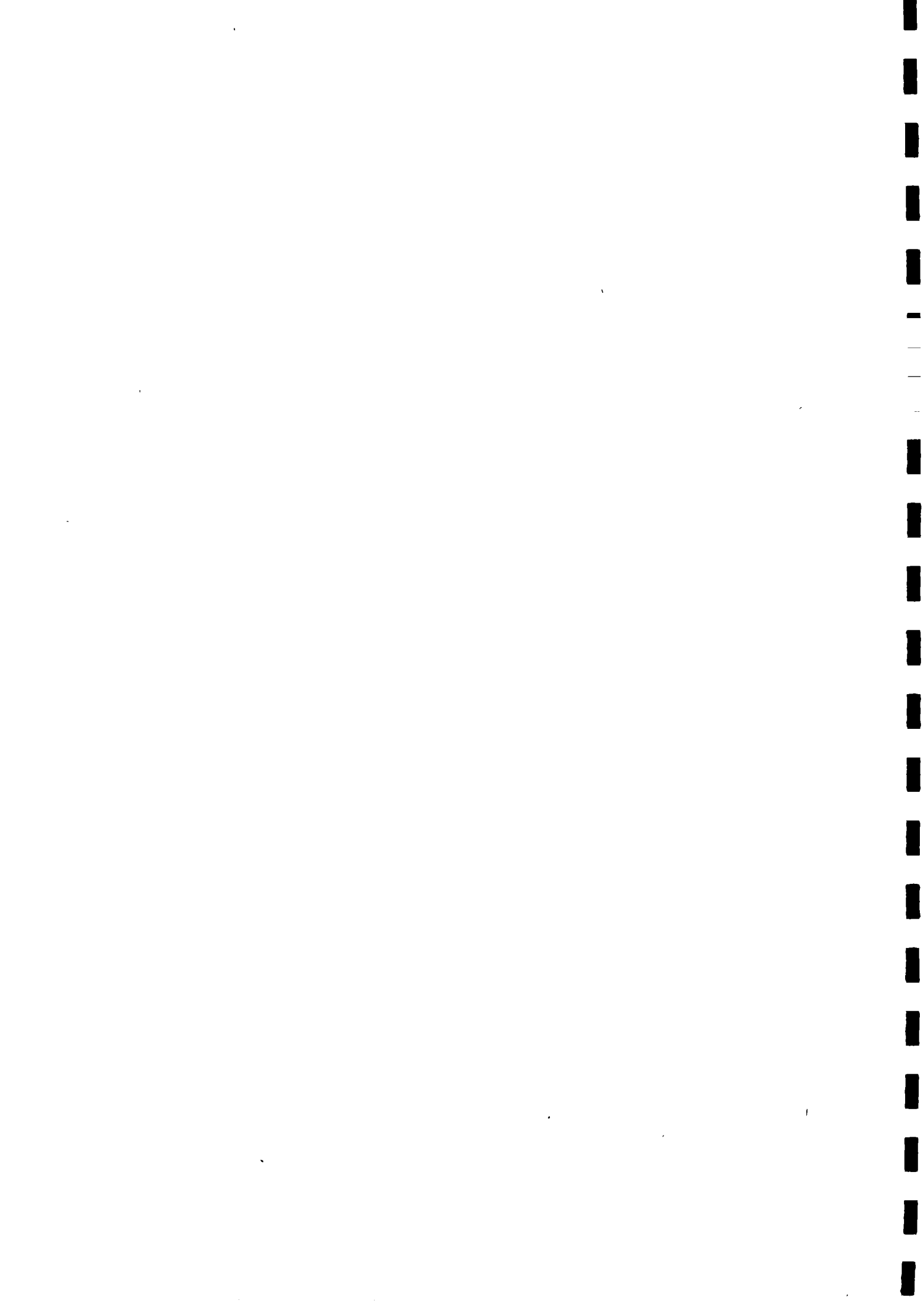
Item/Activity	Phase I			Phase II				Total of Phase I and Phase II
	0-D 1992	J-D 1993	Total Phase I	J-D 1994	J-D 1995	J-D 1996	Total Phase II	
NON-RECURRING (Ref Table 6B for details)								
A. Provincial level								
- Covered jeep		128,800	128,800					128,800
- Motorcycle	28,000		28,000					28,000
- Computer		33,600	33,600					33,600
- Photocopier	17,920		17,920					17,920
- Typewriter	8,960		8,960					8,960
B. District level								
- Mini truck		156,800	156,800					156,800
- Motorcycle	14,000		14,000					14,000
- Typewriter	8,960		8,960					8,960
C. Commune level								
- Repayment book	500		500	4,750			4,750	5,250
Total Non-recurring	78,340	319,200	397,540	4,750			4,750	402,290
RECURRING (Ref Table 6C for details)								
A. Provincial level	4,050	16,200	20,250	16,200	16,200	16,200	48,600	68,850
B. District level	3,210	12,840	16,050	12,840	12,840	12,840	38,520	54,570
C. Commune level	180	720	900	26,640	26,640	26,640	79,920	80,820
Total recurring	7,440	29,760	37,200	55,680	55,680	55,680	167,040	204,240
Grand total Non-recurring and recurring	85,780	348,960	434,740	60,430	55,680	55,680	171,790	606,530



**TABLE 6B: COST OF ADMINISTRATION AND ESTABLISHMENT
(NON-RECURRING)**

Amount in 000 dong

Items	Number of unit	Rate per unit	Cost		
			Phase I	Phase II	Total Phase I and Phase II
A. Provincial level					
- Covered jeep	1	128,800	128,800		128,800
- Motorcycle	2	14,000	28,000		28,000
- Computer, printer, accessories	1	33,600	33,600		33,600
- Photocopier	1	17,920	17,920		17,920
- Type writer	1	8,960	8,960		8,960
Total			217,280		217,280
B. District level					
- Mini truck	1	156,800	156,800		156,800
- Motorcycle	1	14,000	14,000		14,000
- Typewriter	1	8,960	8,960		8,960
Total			179,760		179,760
C. Commune level					
- Repayment book	10,500	0.5	500	4,750	5,250
Grand total			397,540	4,750	402,290



**TABLE 6C: COST OF ADMINISTRATION AND ESTABLISHMENT
(RECURRING)**

Amount in 000 dong

Particulars	Numbers	Cost per month	Cost per year
A. Provincial level			
- Project coordinator (planning & admin.)	1	300	3,600
- Project officer (technical & training)	1	200	2,400
- Project officer (finance & budget)	1	200	2,400
- Office secretary/plg. asst.	1	175	2,100
- Driver	1	175	2,100
- POL & repair of vehicle		200	2,400
- Office contingency		100	1,200
Total			16,200
B. District level			
- Project officer (implementation)	1	200	2,400
- Office secretary	1	175	2,100
- Driver	1	175	2,100
- Seed mason	1	120	1,440
- POL & repair of vehicle		300	3,600
- Office contingency		100	1,200
Total			12,840
C. Commune level			
- Office secretary Phase I	1	50	600
- Office secretary Phase II	37	1850	22,200
- Office contingency Phase I	1	10	120
- Office contingency Phase II	37	370	4,440

Cost for Phase I per year = 29,760

Cost for Phase II per year = 55,680



TABLE 7: COST OF SOFTWARE PROVISIONS
(Advocacy, Training & Research, Administration and Establishment)

Amount in 000 dong

Year	Items			Total cost
	Advocacy (Ref Table 3A)	Training and Research (Ref Table 4A)	Administration & Establishment (Ref Table 6A)	
(1)	(2)	(3)	(4)	(2)+(3)+(4)
Oct-Dec 1992	92,470	8,870	85,780	187,120
Jan-Dec 1993	217,560	2,150	348,960	568,670
Total Phase I	310,030	11,020	434,740	755,790
Jan-Dec 1994	57,690	67,150	60,430	185,270
Jan-Dec 1995	30,280	59,440	55,680	145,400
Jan-Dec 1996	21,700	21,150	55,680	98,530
Total Phase II	109,670	147,740	171,790	429,200
Total for the project	419,700	158,760	606,530	1,184,990

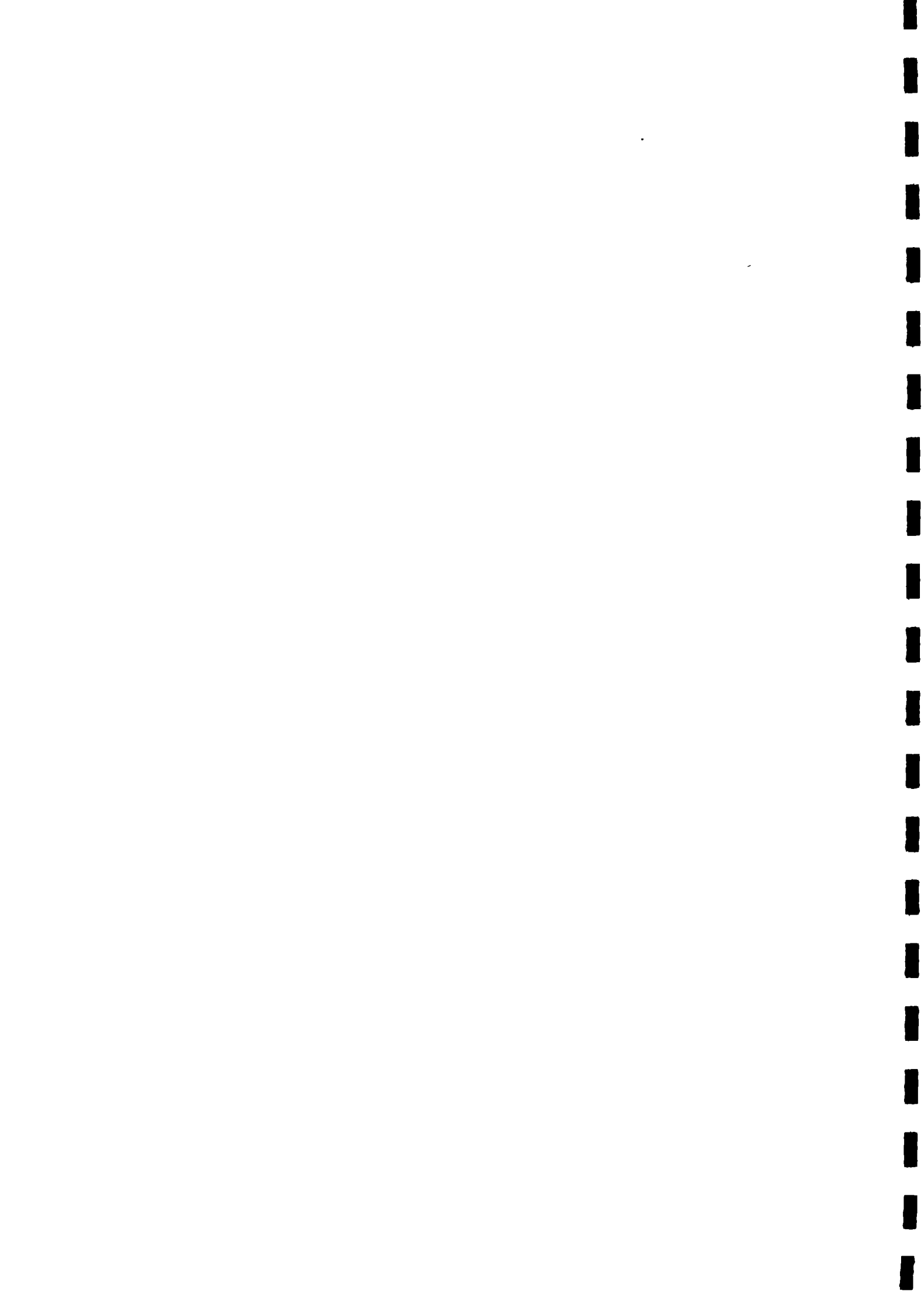


TABLE 8: TOTAL COST OF IMPLEMENTATION (EXCLUDING ADVOCACY, TRAINING, ADMINISTRATION AND ESTABLISHMENT)

Amount in 000 dong

Year	Activities				Total cost of implementation per year (2)+(3)+(4)+(5)
	Cost of latrine and other sanitary facilities (Ref Table 5A)	Cost of infrastructure and demonstration (Ref Table 5A)	Investment as loan for income generation (Ref Note 1 below)	Investment as loan for water development (Ref Note 2 below)	
(1)	(2)	(3)	(4)	(5)	(6)
Oct-Dec 1992	33,710	2,500	6,720	3,360	46,290
Jan-Dec 1993	112,300		22,400	11,200	145,900
Total Phase I	146,010	2,500	29,120	14,560	192,190
Jan-Dec 1994	1,235,300	50,000	246,400	123,200	1,654,900
Jan-Dec 1995	1,662,040	42,500	331,520	165,760	2,201,820
Jan-Dec 1996	1,572,200		313,600	156,800	2,042,600
Total Phase II	4,469,540	92,500	891,520	445,760	5,899,320
Grand total Phase I and Phase II	4,615,550	95,000	920,640	460,320	6,091,510

Note 1 It has been estimated that 20% of the total households, who would accept the package of sanitary facilities shown in Table 2 yearwise, would require financial support for income generation, to enable them to pay for the facilities. Accordingly, USD 20 (224,000 dong) per family has been provided as loan to cover 20% of the families. This loan would be fully recovered within one year.

Note 2 It has been estimated that 20% of the families shown in Table 2 yearwise, would like to develop water facilities, individually or in a group. Accordingly USD 10 (112,000) has been provided per family as loan to cover 20% of the families. The loan would be fully recovered within one year.

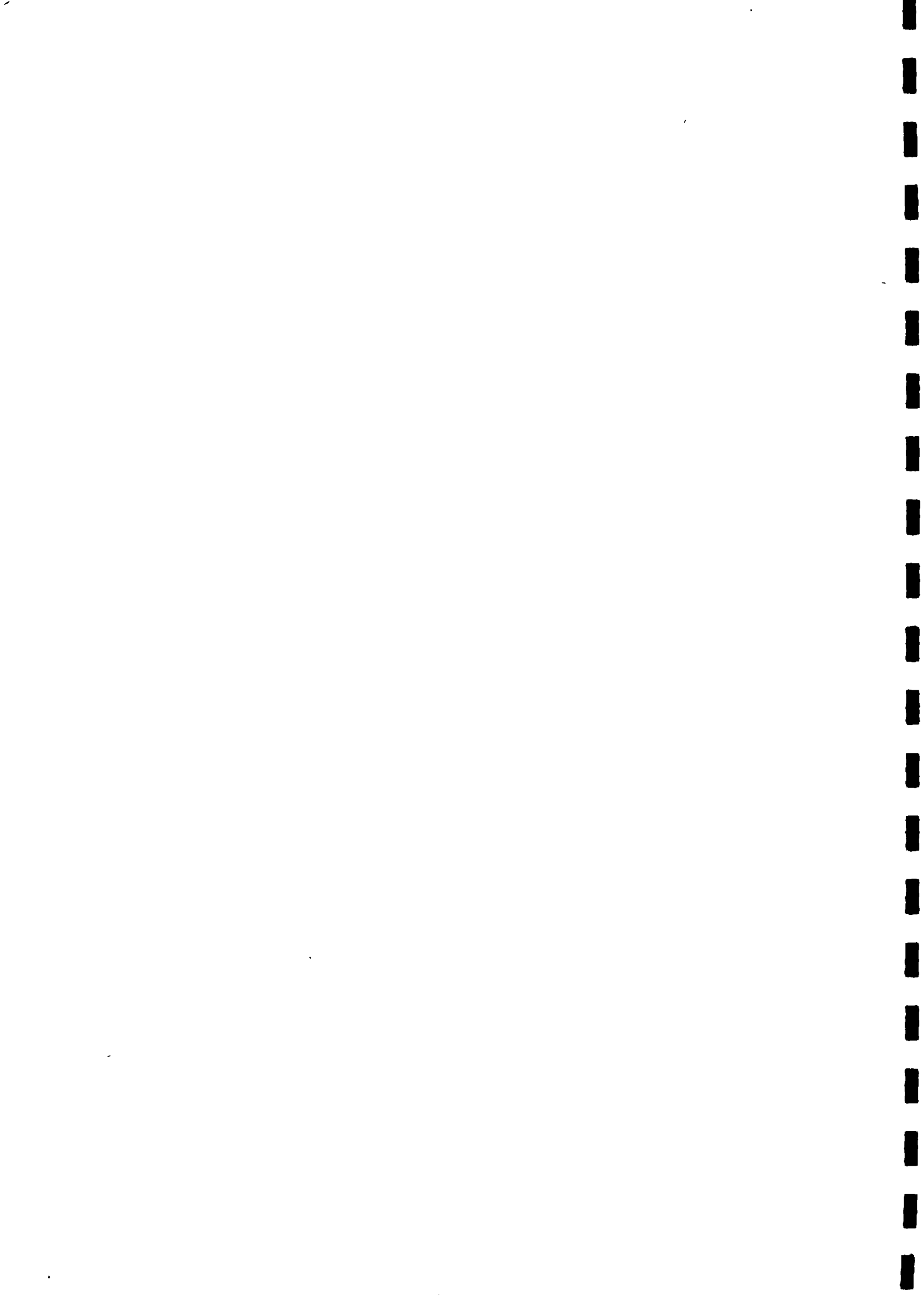


TABLE 9: RECOVERY OF COST FROM BENEFICIARIES AND INVESTMENTS IN REVOLVING FUND

Amount in 000 dong

Year	Cost	Recovery during the year					Total recovery during the year (3)+(4)+(5) +(6)+(7)	Amount needed as loan (2)-(8) (-) investment (+) surplus	Running capital for mass production of sanitation components (see note 1 below) (-) investment	Amount needed for revolving fund (9)+(10) (-) investment (+) surplus			
		From latrine and other sanitary facilities			From loan given for income generation in the previous year	From loan given for water development in the previous year							
(1)	(2)	Outright full recovery from 50% of the beneficiaries (50% of col. 2, Table 8)	Advance payment on outright recovery of 50% of cost from 50% of the beneficiaries	Loan of earlier year (25% of col 2, Table 8)			(3)	(4)	(5)	(6)	(7)	(8)	(9)
Oct-Dec 1992	46,290	16,860	8,420	-	-	-	25,280	(-) 21,010	(-) 11,200	(-) 32,210			
Jan-Dec 1993	145,900	56,150	28,070	8,420	6,720	3,360	102,720	(-) 43,180	-	(-) 43,180			
Total Ph I	192,190	73,010	36,490	8,420	6,720	3,360	128,000	(-) 64,190	(-) 11,200	(-) 75,390			
Jan-Dec 1994	1,654,900	617,650	308,820	28,070	22,400	11,200	988,140	(-) 666,760	(-) 224,000	(-) 890,760			
Jan-Dec 1995	2,201,820	831,020	415,510	308,820	246,400	123,200	1,924,950	(-) 276,870	(-) 190,400	(-) 467,270			
Jan-Dec 1996	2,042,600	786,100	393,050	415,510	331,520	165,760	2,091,940	(+) 49,340	-	(+) 49,340			
Total Ph II	5,899,320	2,234,770	1,117,380	752,400	600,320	300,160	5,005,030	(-) 894,290	(-) 414,400	(-) 1,308,690			
Total Ph I and Ph II	6,091,510	2,307,780	1,153,870	760,820	606,040	303,520	5,133,030	(-) 958,480	(-) 425,600	(-) 1,384,080			
Jan-Dec 1997	-	-	-	393,050	313,600	156,800	863,450	(+) 863,450	-	(+) 863,450			

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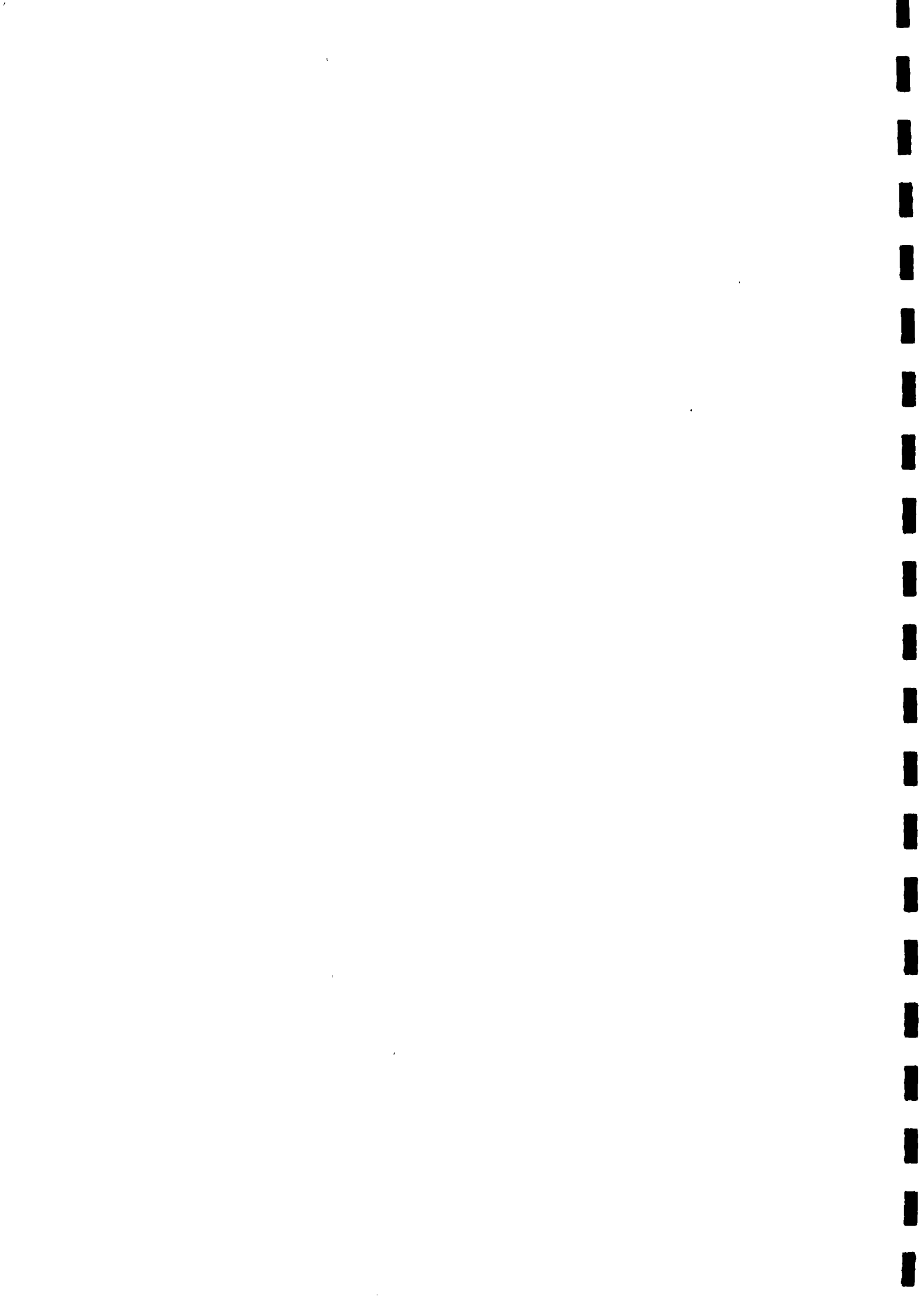


TABLE 9 (contd)

Note

1. Running capital for mass production of components for latrine and other sanitary facilities would be needed @ 11,200,000 dong (USD 1,000) per commune, to be given once initially. At the end of the project, at least 50% of the amount, if not full, could be transferred to other communes/districts for reinvestment.

2. No investment is required on the last year of the project (1996) (Ref column 9).

3. Total cost of implementation (excluding software-advocacy, training, admin. & establishment), (column 2)	=	6,091,510
Running capital (column 10)	=	425,600

Total		6,517,110

4. Total investment required in the revolving fund for the project (column 9)	=	958,480
Running capital (column 10)	=	425,600

Total		1,384,080

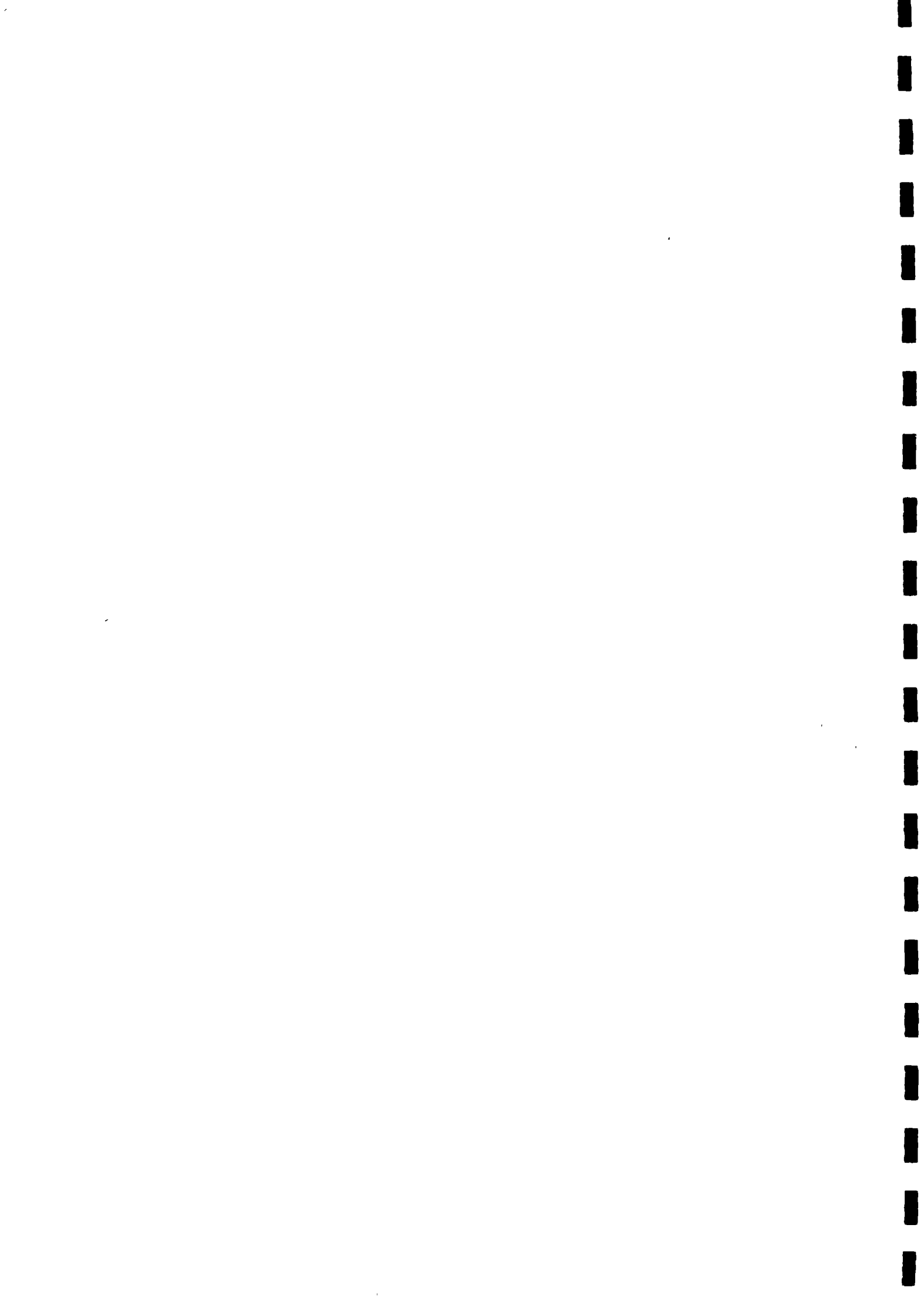
5. Total recovery of investment at the end of the project (column 8) = 863,450

6. Total amount not recovered from beneficiaries
 1,384,080 - 863,450 = 520,630
 This amount of 520,630 consists of:

(i) Cost of infrastructure development and demonstration (Ref column 3, table 8)	=	95,000
(ii) Running capital (column 10 of this table) (which would be reinvested, refer note 1 above)	=	425,600

Total		520,600

Thus the project is self sustainable. It requires an investment of only 21.2% of the total cost of implementation (item 4/item 3 above) which would be fully recovered except the portion mentioned under item 6 above.



**TABLE 10: EXTENT OF ADDITIONAL FUND REALISED TO MEET
PART OF PROJECT EXPENDITURE, OUT OF INVESTMENTS**

Amount in 000 dong

Year	Investments as loan			Total investments (2)+(3)+(4)	10% charges on investment (10% on col 5)	Total earning during the year **
	Latrine and other facilities (col 4, table 9)	Income generation (col 4, table 8)	Water development (col 5, table 8)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
O-D 1992	8,420	6,720	3,360	18,500	1,850	-
J-D 1993	28,070	22,400	11,200	61,670	6,167	1,850
Total Ph I	36,490	29,120	14,560	80,170	8,017	1,850
J-D 1994	308,820	246,400	123,200	678,420	67,842	6,167
J-D 1995	415,510	331,520	165,760	912,790	91,279	67,842
J-D 1996	393,050	313,600	156,800	863,450	86,345	91,279
Total Ph II	1,117,380	891,520	445,760	2,454,660	245,466	165,288
Total Ph I and Ph II	1,153,870	920,640	460,320	2,534,830	253,483	167,138
J-D 1997	-	-	-	-	-	86,345
					Grand total	253,483

Note

1. This earning (**), together with the 10% service charge (about 230,777 thousand dong) realized from the construction/sale of sanitary facilities (refer Note 3, Table 58) might be utilized as follows:

- (i) Incentives to motivators (about 5%)
- (ii) Cover bad debt (i.e loans not realized)
- (iii) Part cost of contingency
- (iv) Reserve fund for continuing the programme after the project period in or outside the district
- (v) Any other expenditure on software items.



TABLE 11: MOBILIZATION OF FUND FOR THE PROJECT

Amount in 000 dong
 USD within ()
 USD 1 = 11,200 dong (as on 1.8.1992)

Year	Fund required for activities			Fund to be mobilized								
	Cost of software (col 5, table 7)	Revolving fund for construction (col 11, table 9)	Total	UNICEF					MOH/Province/District			Total fund mobilized (9)+(12)
				Advocacy (table 3A)	Training (table 4A)	Admin. & Establish-ment (table 6A)	Revolving fund	Total	Admin. & Establish-ment	Revolving fund	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
O-D 1992	187,120 (16,707)	32,210 (2,876)	219,330 (19,583)	92,470 (8,256)	8,870 (792)	85,780 (7,659)	32,210 (2,876)	219,330 (19,583)	*	-	-	219,330 (19,583)
J-D 1993	568,670 (50,774)	43,180 (3,855)	611,850 (54,629)	217,560 (19,425)	2,150 (192)	348,960 (31,157)	-	568,670 (50,774)	*	43,180 (3,855)	43,180 (3,855)	611,850 (54,629)
<u>Total Ph I</u>	755,790 (67,481)	75,390 (6,731)	831,180 (74,212)	310,030 (27,681)	11,020 (984)	434,740 (38,816)	32,210 (2,876)	788,000 (70,357)		43,180 (3,855)	43,180 (3,855)	831,180 (74,212)
J-D 1994	185,270 (16,542)	890,760 (79,532)	1,076,030 (96,074)	57,690 (5,150)	67,150 (5,996)	60,430 (5,396)	590,760 (52,746)	776,030 (69,288)	*	300,000 (26,786)	300,000 (26,786)	1,076,030 (96,074)
J-D 1995	145,400 (12,982)	467,270 (41,720)	612,670 (54,703)	30,280 (2,704)	59,440 (5,307)	55,680 (4,971)	167,270 (14,935)	312,670 (27,917)	*	300,000 (26,786)	300,000 (26,786)	612,670 (54,703)
J-D 1996	98,530 (8,797)	-	98,530 (8,797)	21,700 (1,938)	21,150 (1,888)	55,680 (4,971)	-	98,530 (8,797)	*	-	-	98,530 (8,797)
<u>Total Ph II</u>	429,200 (38,321)	1,358,030 (121,252)	1,787,230 (159,574)	109,670 (9,792)	147,740 (13,191)	171,790 (15,338)	758,030 (67,681)	1,187,230 (106,002)	*	600,000 (53,571)	600,000 (53,571)	1,787,230 (159,574)
Total Ph I and Ph II	1,184,990 (105,802)	1,433,420 (127,983)	2,618,410 (233,786)	419,700 (37,473)	158,760 (14,175)	606,530 (54,154)	790,240 (70,557)	1,975,230 (176,359)	*	643,180 (57,426)	643,180 (57,426)	2,618,410 (233,786)

* Cost of supporting facilities, premises, equipments and personnel to be provided by the Government at the level of the Ministry, Province, District and Communes, have not been estimated.

Participation: UNICEF contribution is approximately 75% of the total investments (col 9/col 13) and Government contribution is about 25% (col 12/col 13).

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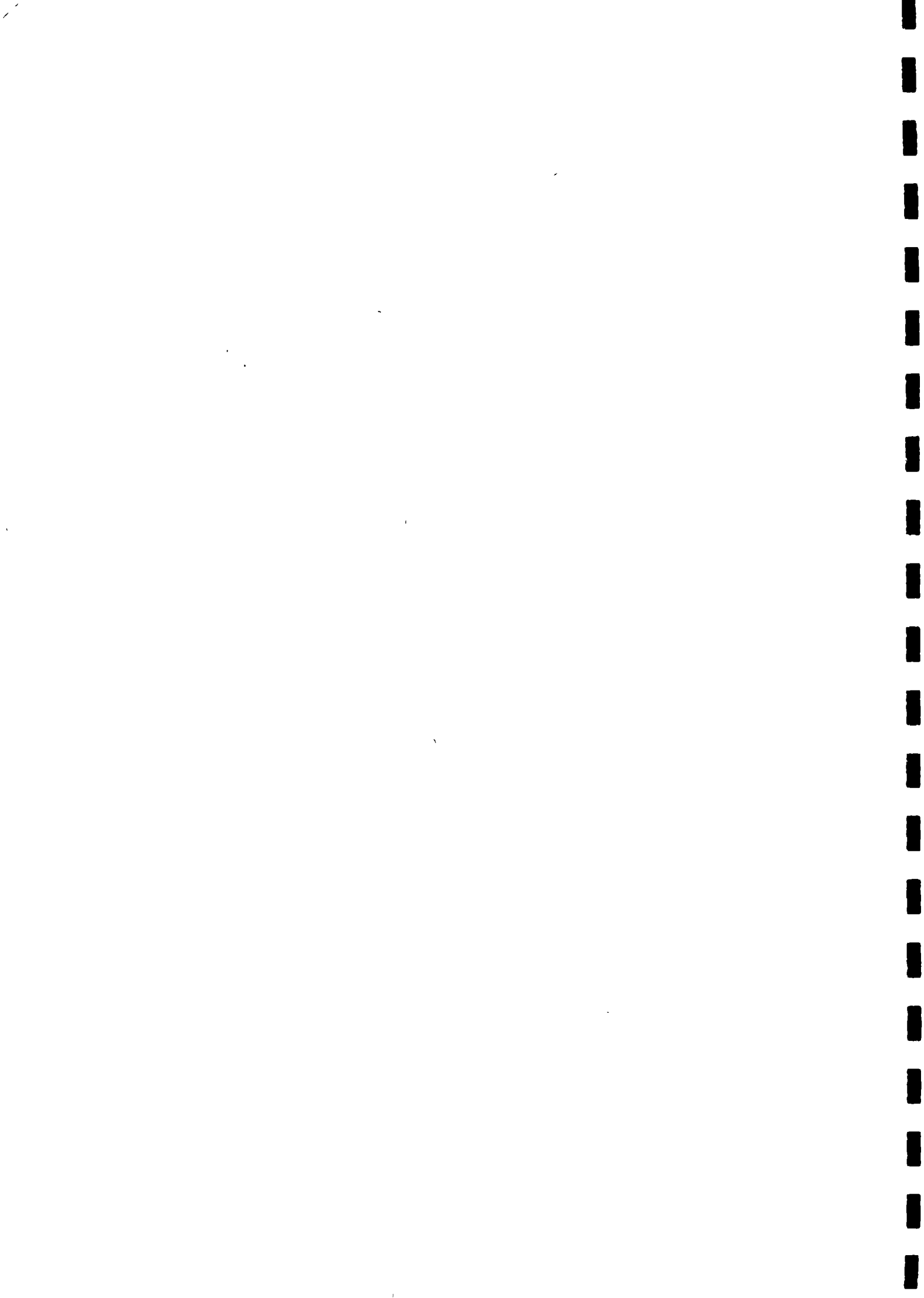


TABLE 11 (contd)

Note:

Revolving fund:	1.	Actual investment by UNICEF (col 8)	=	790,240 thousand dong
		by Government (col 11)	=	643,180
		Total		<u>1,433,420</u>
	2.	Actual recovery (Table 9) in 1996	=	49,340
		in 1997	=	863,450
		Total		<u>912,790</u>
	3.	Unrecovered amount (1) - (2)	=	520,630
		This amount is utilized as explained below and as mentioned earlier in Note 6, Table 9:		
	-	Cost of infrastructure and demonstration (col 3, table 8)	=	95,000
	-	Running cost given to communes for mass production of components, which can be reused or transferred (col 10, table 9)	=	425,600
		Total		<u>520,600</u>

