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**INSTITUTIONAL DEVELOPMENT
IN COMMUNITY WATER SUPPLY AND SANITATION**

REPORT OF AN INFORMAL CONSULTATION

Geneva, 18-22 November 1985



**WORLD HEALTH ORGANIZATION
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This document is based on the discussions and recommendations of an informal consultation on institutional development, which was held in WHO, Geneva, from 18 to 22 November 1985. The background documentation for the consultation, and the case studies which were presented by the participants, were published in December 1985 as document WHO/CWS/85.5: "Institutional Development in Community Water Supply and Sanitation: Case Studies and Issue Papers", also available in French.

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ABBREVIATIONS

AFRO	Regional Office for Africa
AMRO	Regional Office for the Americas
CWS	Community Water Supply and Sanitation
EURO	Regional Office for Europe
FEC	Fonds d'Equipement Communal
HRD	Human Resources Development
IDWSSD	International Drinking Water Supply and Sanitation Decade
IRR	Internal Rate of Return
MOH	Ministry of Health
NAC	National Action Committee
NGO	Non Governmental Organization
O&M	Operation and Maintenance
ONEP	Office National de l'Eau Potable (National Water Organization)
PHC	Primary Health Care
PWDs	Public Works Departments
RR/UNDP	Resident Representative of the United Nations Development Programme
SEARO	WHO Regional Office for South-East Asia
TAG	Technology Advisory Group
TCDC	Technical Cooperation among Developing Countries
TST	Technical Support Team
WHO	World Health Organization
WPRO	Regional Office for the Western Pacific
W&S	Water and Sanitation

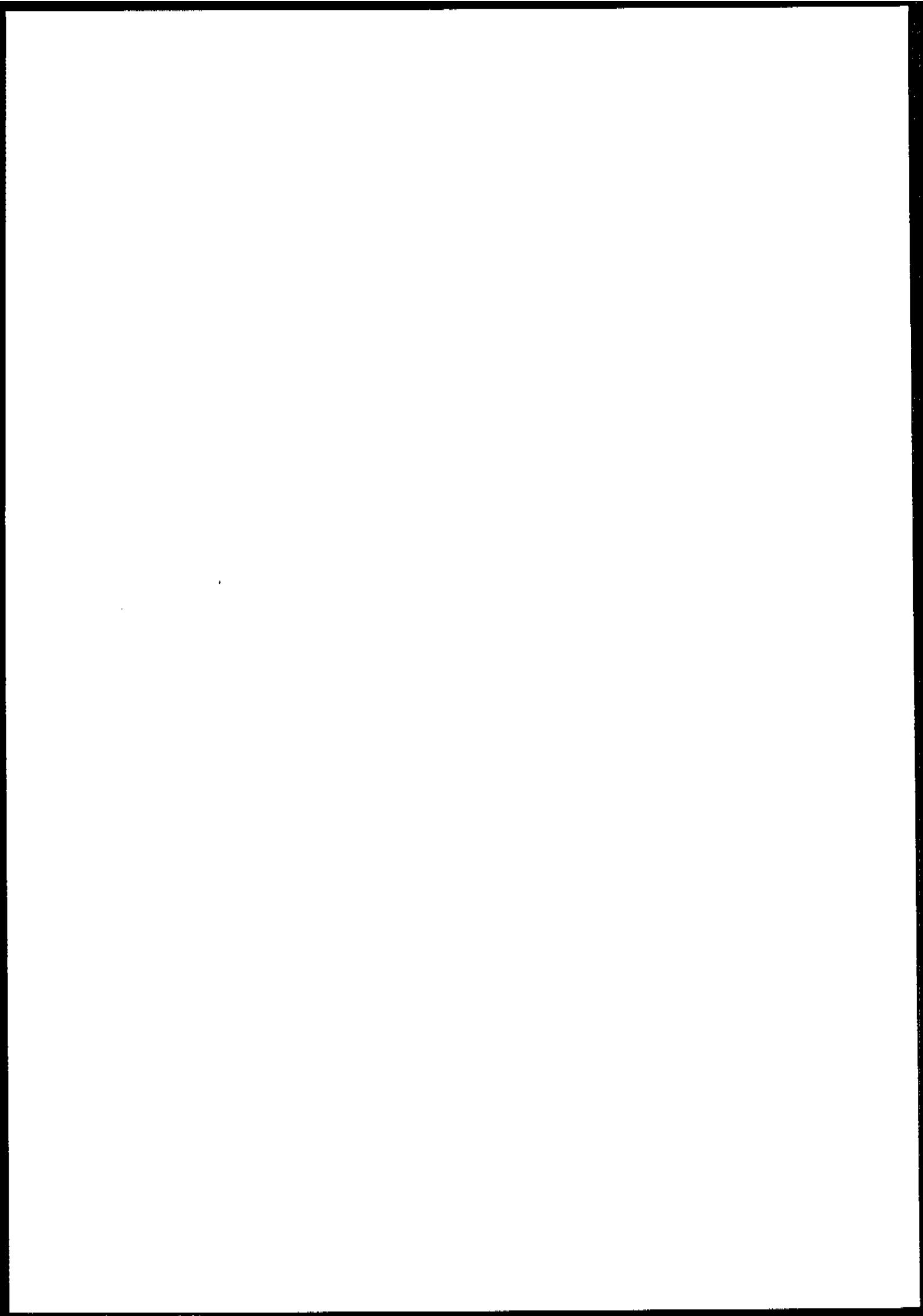
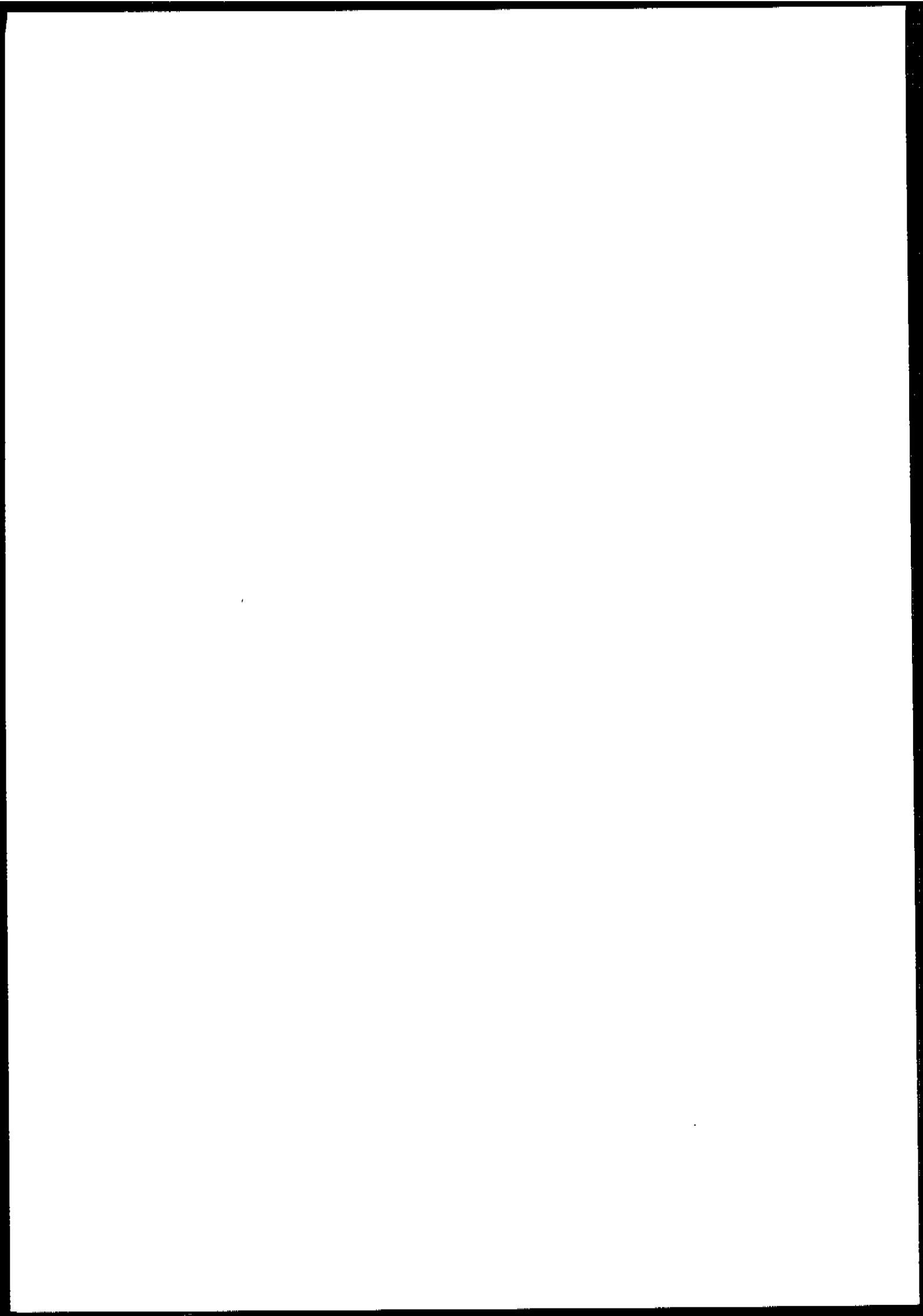


TABLE OF CONTENTS

<u>INTRODUCTION</u>	1
<u>RECOMMENDATIONS OF THE CONSULTATION</u>	2
.Administrative arrangements (including decentralization)	2
.Transfer of resources: the financial issue	4
.Intra- and intersectoral cooperation and coordination	6
.Community involvement	8
.Human resources development	8
.Technology	9
.WHO's role in institutional development in CWS	9

TABLE OF ANNEXES

<u>ANNEX I LIST OF PARTICIPANTS</u>	12
<u>Annex II ESSENTIAL CHARACTERISTICS OF DECADE-ORIENTED INSTITUTIONS</u>	13
<u>Annex III COUNTRY PRESENTATIONS</u>	15
Annex III Chart I Nepal	14
A. Nepal: decentralization	15
Annex III Chart II Malaysia	16
B. Malaysia: intersectoral action	17
Annex III Chart III Colombia	18
C. Colombia: a changing profile	19
Annex III Chart IV Morocco	20
D. Morocco: limits of decentralization	21
Annex III Chart V Sierra Leone	22
E. Sierra Leone: an integrated approach	23
F. Some common features in the design of institutional arrangements	24



INTRODUCTION

1. An informal consultation was held at the Headquarters of the World Health Organization (WHO) in Geneva, from 18 to 22 November 1985, on Institutional Development in Community Water Supply and Sanitation (CWS). The members of the Consultative Group included six temporary advisers from five developing countries of five different WHO Regions (Colombia - AMRO, Malaysia - WPRO, Morocco - EURO, Nepal - SEARO, and Sierra Leone - AFRO). The meeting was also attended by two international advisers and by WHO staff from AMRO, SEARO, and the Environmental Health Division of WHO Headquarters. The complete list of participants is attached as Annex I.
2. In his opening address, Mr Odyer A. Sperandio, Manager, Community Water Supply and Sanitation Unit, welcomed the participants and recalled the objectives of the consultation:
 - to review the situation in institutional development in CWS, half-way through the International Drinking Water Supply and Sanitation Decade (IDWSSD);
 - to identify the constraints which have hampered the development of national institutions;
 - to recommend actions and formulate plans for the gradual removal or reduction of identified constraints:
 - . at country level (national, regional, local),
 - . by the external support community (financial and technical agencies),
 - . by WHO (at global, regional and country levels).
3. The documentation available to the participants included the following:
 - "Report of an Informal Consultation on National Institutional Development for Water Supply and Sanitation", WHO/SEARO, 24-28 June 1985; the SEARO consultation had in particular attempted to define a profile of Decade-oriented institutions at central, first referral and local levels; this is presented in tabular form in Annex II;
 - "Achieving Success in Community Water Supply and Sanitation Projects", WHO/SEARO, Regional Health Papers No 9;
 - a report by each one of the members of the Consultative Group on institutional development in his country of origin; these reports have been summarized in the form of short case studies which are presented in Annex III;
 - various background documents which have now been consolidated into a single publication: "Institutional Development in Community Water Supply and Sanitation: Case Studies and Issue Papers" (WHO/CWS/85.5).
4. The agenda of the consultation was broadly as follows:
 - the Consultative Group first agreed on a working definition of institutional development, the main structures which it involves, and the mechanisms to be improved for achieving a Decade-oriented institutional framework: country situations were presented to illustrate these findings and define the major issues;
 - the Consultative Group subsequently broke into three Working Groups, to deal separately with the three fundamental issues related to institutional mechanisms and linkages:
 - . administration (including, but not limited to decentralization),
 - . intra- and intersectoral cooperation and coordination, and
 - . transfer of resources (funds, manpower, technology and community work).

The recommendations of the Working Groups were presented and discussed in a final plenary session and are summarized in the present report.

5. The approaches of the IDWSSD emphasize complementarity of water supply and sanitation, precedence to be given to underserved populations, self-reliant and self-sustaining action, socially relevant systems, community involvement, and association of CWS with programmes in related sectors, particularly Primary Health Care (PHC).

6. The Consultative Group noted that, in many countries, the present structural arrangements were not oriented towards the implementation of these approaches: different agencies dealt with water supply and sanitation respectively, and did not adequately coordinate their efforts; water utilities operating urban systems continued to give precedence to the more privileged population groups; agencies remained centralized and therefore development continued to be based on government plans rather than community objectives, self-reliance was not sufficiently enhanced, new installations did not correspond to people's needs and means, and community involvement remained a subject of official policy statements rather than a common feature in CWS projects.

7. Besides, the present structures did not provide for easy coordination and association of CWS with related sectors, particularly with PHC; the health education, human resources development, and institutional strengthening components of PHC programmes were not sufficiently used to foster CWS development.

8. The mechanisms on which the Consultative Group focused its attention were those which allow vertical (from central to local) and horizontal (intersectoral) cooperation. They have been broadly designated as decentralization, coordination and transfer of resources (funds, people's participation, manpower, technology).

9. Decentralization can occur in the form of either devolution or deconcentration or both:

- devolution occurs when authority and responsibilities are given by a central institution to another organization (e.g., a Village Council).
- deconcentration occurs when a central agency entrusts parts of its authority and responsibilities to its own field offices at lower levels.
- for decentralization to be successful, both deconcentration and devolution are required:
 - . deconcentration is necessary to provide effective support to communities;
 - . devolution is a prerequisite to community involvement.

10. One of the main challenges of the Decade is to foster community-based development, and to bring central government's support as close as possible to the town, village or hamlet, where decisions could be made and implemented. This requires effective decentralization, including both deconcentration of the CWS agencies and devolution of powers and responsibilities to communities.

RECOMMENDATIONS OF THE CONSULTATION

Administrative arrangements (including decentralization)

11. Frequent misunderstandings of the decentralization process result in a trend towards deconcentration without appropriate devolution of authority and responsibilities to the communities. Conversely, many governments and international agencies tend to focus their efforts in institutional development on the sole promotion of community involvement (through devolution): due to cost and logistic constraints, CWS agencies are often unable to deconcentrate their structures to a level allowing the community to have easy access to those services which it cannot by itself provide.

12. The administrative mechanisms for the planning and implementation of Decade programmes in individual countries should be such as to ensure the involvement of the intended beneficiaries of designed improvements. This requires that authority and responsibility for certain tasks be devolved upon groups formed at local level; also, these groups should have access to appropriately deconcentrated units of central agencies.

13. Agencies should expand their structures to various levels from the centre outwards, on the basis of an action plan for nationwide coverage of needs. Staff deployment should be organized and effective as soon as possible, in view of the predictable increase in demands from local institutions, and the responsiveness of agencies' staff resources to local needs should be ensured.

14. In order to make the process cost-effective and economically feasible, local institutions should be enabled to mobilize sufficient local resources and in particular to appoint staff accountable to themselves rather than to deconcentrated units of government agencies.

15. Training programmes and procedures for reporting and other transactions, including planning transactions, should be developed between the centre and the deconcentrated units of sector agencies. A system of advanced planning should be established at national level to provide resources and other support to local institutions.

16. Three main alternatives are offered to decision-makers for the development of a CWS administration nationwide:

- (i) government to deconcentrate its own structures to a level as close as possible to the communities; authority and responsibility to be devolved upon the community for certain tasks; ability of the community to mobilize resources; determination of an appropriate intersectoral software/hardware mix to bridge the gap between deconcentrated units of central government and communities;
- (ii) government to entrust a CWS agency enjoying a large degree of autonomy with all sector responsibilities; this agency to deconcentrate its own structures to a level as close as possible to the community; government to support and monitor progress through the provision of software services; communities to buy CWS services from the autonomous agency (partial or full cost recovery); alternatively, the agency is financed by government which thus provides an indirect subsidy to the community;
- (iii) a combination of alternatives (i) and (ii), i.e. government to decentralize its own structures to a level where they can appropriately deal with communities; these communities depend upon local autonomous institutions for their supplies; in this alternative, government can choose to deconcentrate its hardware structures only within manageable limits, beyond which autonomous agencies take over; the support of deconcentrated software branches of central government is still required to assist and control regional or local CWS agencies.

17. In reviewing the country presentations and the organizations' charts of Annex III, Malaysia, Nepal and Sierra Leone appear to have developed structures and mechanisms consistent with alternative (i) above, while Morocco, with the ONEP-Régies model, is closer to alternative (iii); Colombia has experienced all three alternatives; currently, the general trend in this country is towards reinforcement of municipal structures, and deconcentration of the CWS sector to a level close to the community, with emphasis on mobilization of local resources and intersectoral coordination.

18. The Consultative Group made the following recommendations on administrative organization:

- (a) since the devolution of increased authority and responsibility to communities is an essential element of Decade approaches, the conditions in which this process can be established and intensified should be studied, preferably in the context of nationwide sector reviews by staff of sector and planning agencies, with support from external agencies and major development banks; such studies should be followed by national workshops with a view to developing action plans to be submitted to central government;
- (b) the intent to proceed with decentralization (or centralization) should be firmly established by national legislation, which should include provisions for determination of the limits of devolution, boundaries of deconcentration and mechanisms for horizontal and

vertical integration, and authorization for resource mobilization; in order to accelerate this process, study tours of sector administrators could be organized, with support from external agencies as required, to allow them to benefit from other countries' experience in a TCDC (technical cooperation among developing countries) context;

- (c) institutions should be strengthened (or in some cases created), at users' level, at the level of Village Councils or other community organizations, and at the various planning and referral levels; support from external technical agencies can be required in this process, for instance for human resources development and for the preparation of manuals and guidelines for Users' Groups, Village Councils and planning and referral institutions;
- (d) the process should be continuously monitored at both political and executive levels, preferably by independent committees or special task forces; National Action Committees can play an important role in this respect; the feedback from these monitoring groups should be used to further stimulate local institutions towards improvements in planning and implementation, and to reinforce institutional cooperation and coordination; another important outcome of monitoring should be the gradual identification of gaps between the communities and the deconcentrated structures of central agencies, and the adjustment of resources at first referral level in order to fill these gaps.

Transfer of resources: the financial issue

19. Communities as well as CWS agencies have few resources for new undertakings; their funds and their personnel are usually overcommitted. The possibilities of generating a surplus in towns for transfer to the urban poor and rural subsectors are limited. The motivation for such a transfer is often non-existent: qualified personnel working in towns are reluctant to leave their comfortable positions; CWS managers are equally reluctant to allocate funds to service extensions in urban poor and rural areas, because of considerable risks, low expected returns, and sometimes ignorance of CWS development conditions, particularly in villages. For political, financial and social reasons, there is a permanent commitment of CWS agencies to maintain and improve service in large towns. Many of these are in need of major rehabilitation and network extension during the present Decade, while IDWSSD efforts are intended to focus on the underserved rural and urban poor populations.

20. Resources allocation policies and transfer mechanisms should be oriented towards the goal of financial self-sufficiency of the CWS sector. It is however recognized that the lengths of time required to achieve such an objective vary between subsectors; partial or even full cost recovery can be prescribed as a solution to improve urban water supply in the short term, while it will for some time remain a long-term objective in rural water supply; sanitation can be expected to lag behind in terms of financial performance as well as in extension of coverage.

21. Financial autonomy is distinct from the fulfillment of a country's economic objective. It is largely a public utilities' concept: in order to ensure the financial equilibrium of the utility, the selling price of water should be at least equal to its all-inclusive financial cost. This goal has economic implications: its attainment requires that the cost price of water be within the limits of what householders and other consumers can afford and are willing to pay; it also has the indirect effect of discouraging excessive uses of scarce resources, particularly water. It does not however have the effect of adjusting demand to a level corresponding to an optimum use of the resource.

22. This effect is best attained by charging the full economic cost of CWS services. The incremental, qualitative, and community-based aspects of the Decade are particularly important in this context, as each one of these characteristics has the effect of lowering economic costs and increasing benefits. Transfers of resources therefore should be analyzed in two ways:

- (i) flows of funds (and other resources) to and from the sector agency or the community operating and maintaining CWS installations (financial transfers);

(ii) flows of sector resources towards other sectors which in turn contribute to CWS development (economic transfers).

23. This suggests that there are broadly two ways to optimize the use of financial and other resources:

- (i) the financial approach, which consists in minimizing costs, maximizing revenues, and obtaining contributions to equity and loans or grants in the most favourable conditions;
- (ii) the economic approach, which consists in mobilizing national resources to the extent possible, and achieving gradual increases in coverage through progressive, essentially qualitative improvements requiring contributions from other sectors and effective participation of intended beneficiaries.

24. The Consultative Group made the following recommendations on resources transfers:

- (a) water rates and other charges for CWS services should be based on both financial and economic considerations. Since financial autonomy can only be achieved if average tariff exceeds average cost, detailed resources studies are required in order to determine how costs can be minimized. On the revenue side, the feasibility of charging an average tariff which will ensure financial autonomy should be checked against the ability and willingness of various consumers' categories to pay their share of the cost of water;
- (b) the determination of a sound financial development policy requires studies of the potential demand for CWS services, the scope for reducing costs and increasing revenues, and the conditions under which all types of resources which contribute to CWS improvements can be mobilized. In this approach, the objective of "full cost recovery" becomes secondary to those of "cost reduction", "least cost solution", "high cost effectiveness", and "high benefit - cost ratio";
- (c) in view of the necessity to reconcile economic and financial objectives, tariffs for CWS services should be set as close as possible to their full economic cost (long-run marginal cost): this is the information which the consumer needs to decide rationally whether he should increase or decrease consumption; the economic cost should be based on a costing of the various resources which reflect their values to the economy rather than their market prices;
- (d) in financial terms, tariff structures should be designed to alleviate the burden of high water rates for those who must have water at low cost, while ensuring that optimum use is made of the scarce water resource and that the financial situation of the water utility or agency is not compromised;
- (e) financial mechanisms should be designed to ensure that CWS funds will be used exclusively in the sector:
 - . to cover the full cost of operation and maintenance,
 - . to finance sector development;

of the various mechanisms which exist for this purpose, the best known is the "revolving" Fund, with income corresponding to loans and grants from government and other agencies and from debt-service payments by the beneficiaries, while the proceedings go to loans and grants to sector institutions and to cover the operating and financial expenses of the Fund;

- (f) the operation of a Fund requires (and often results in) stability of sector institutions (in view of the long-term commitments which must be made), allocation of proceedings according to the socio-economic conditions of the intended beneficiaries, direct remittance of the Fund's proceedings to the institution responsible for project implementation and operation, monitoring of performance, and provision of technical assistance to borrowers;

- (g) the feasibility of reducing costs and improving services through selective privatization of some CWS activities should be checked; such activities include for instance billing and collection, treatment plant operation, leak detection and repair, and rural water point maintenance;
- (h) the financial impact of decentralization should be evaluated, and measures should be studied to optimize at central level the financial efficiency of deconcentrated administrations (joint procurement, standardization of equipment and methods, etc);
- (i) the effect on cost of physical and administrative "leak" detection and reduction, as well as selection of appropriate technology should be studied; the compatibility of tariffs with the goals of economic efficiency (including social justice, cross-subsidization) and financial viability (including appropriate allowances for depreciation, bad debts, extension and inflation) should also be checked;
- (j) the analysis of transfers of funds and other resources requires exclusive studies which can be supported by major development banks and agencies which are frequently involved in pre-investment programmes.

Intra- and intersectoral cooperation and coordination

25. The commonly encountered fragmentation of CWS responsibilities between a large number of agencies and sectors has some advantages; these include:

- (i) the ability to allocate priority to sanitation when there exists an agency in charge of this subsector only. Sanitation is often a neglected function in those agencies which are in charge of the CWS sector as a whole;
- (ii) similarly, the ability to plan and implement CWS services in rural areas, through an agency dealing with rural CWS only, thereby preventing the rural subsector from lagging behind urban CWS;
- (iii) similarly, to foster the development of operation and maintenance, which are often neglected in agencies which are primarily oriented towards construction of new works;
- (iv) similarly, to ensure that adequate support to the development of the CWS sector is provided by other sectors responsible for instance for health education, promotion of community participation, and water quality surveillance;
- (v) it is easier to develop procedures and technologies suitable for specific situations if agencies are specialized;
- (vi) the overall direction of priorities is less affected by political pressures once the various programmes and plans of many different agencies have been adopted and are being implemented.

26. The disadvantages of sector fragmentation include:

- (i) the possibility of overlapping or duplication of functions and responsibilities between agencies;
- (ii) the chance that there may be gaps between the service areas of various agencies;
- (iii) the sum of overhead costs of various agencies will generally be higher than in the case of a single agency;
- (iv) there will be duplication of efforts in areas such as manpower development;
- (v) it will be more difficult to attract resources unless the plans of the various agencies active in CWS can be integrated.

27. It may be feasible to reduce sector fragmentation by restructuring organizations or by reallocation of agency functions; coordination within and between sectors is necessary:

- (i) to ensure that the impacts of investments in CWS are maximized;
- (ii) to prevent waste and achieve maximum economy;
- (iii) to speed up the delivery of services to the communities;
- (iv) to prevent overlaps or gaps in coverage;
- (v) to improve the operation of the services;
- (vi) to ensure community acceptance and support;
- (vii) to control more effectively the overall national planning and implementation processes.

28. For coordination and intrasectoral and intersectoral cooperation to succeed:

- (i) there should be at least one common objective adopted by all parties involved;
- (ii) there should be advantages for each agency to participate, with respect to its own responsibilities or programmes;
- (iii) one single agency at each level should be given the responsibility and authority to carry out a coordinating role;
- (iv) lateral (interagency or between sectors) as well as vertical (within agencies) coordination should be simultaneously organized;
- (v) the coordinator should in all cases be a national agency; international agencies can only play an advisory role.

29. Probably the most important aspect of intersectoral cooperation and coordination is related to the integration of water supply and sanitation in the development of PHC. This integrated approach has a multiplying effect in terms of extension of coverage and impact of CWS improvements. For it to be effective, selected members of the community (facilitators, community health workers, etc)⁽¹⁾ should be trained to work with the community in identifying its needs and priorities (water supply, sanitation, nutrition, etc), and to seek technical assistance from responsible government agencies (Ministry of Health, Public Works Department, Ministry of Education, etc) to enable the community to plan, construct, operate and maintain its water supply and sanitation facilities.

30. Sector agencies will need to deconcentrate their structures and to develop technical capabilities and resources to support these community efforts. There should also be a feedback mechanism within these agencies to facilitate the flow of information related to needs expressed by communities, so that strategies and policies developed at national level can be appropriately adjusted. Since the community becomes the focal point of the various sector agencies (bottom-up approach), it should also be the most effective coordinator.

31. The Consultative Group made the following recommendations:

- (a) intra- and intersectoral cooperation and coordination should be organized broadly in five phases:
 - (i) a study phase including a review of the institutional situation with identification of overlaps, gaps and other constraints in CWS development, proposals for new definitions of agencies' responsibilities and functions, draft legislation, recommendations on coordination at all levels, and identification of information and training needs and systems;
 - (ii) an implementation phase, corresponding to the reorganization of the agencies and the development of information systems;

(1) IDWSSD Advisory Services Project RAS 81/024 How to Achieve Success in Community Water Supply and Sanitation Projects, WHO/SEARO, 1985.

- (iii) a planning phase, based on a situation analysis, with formulation of intersectoral policies and strategies, identification of projects and preparation of programmes;
 - (iv) an integration phase, where all plans are coordinated in terms of objectives and staging, and resources are allocated;
 - (v) a project development phase, extending from construction to operation, maintenance, monitoring and evaluation.
- (b) by its very nature, the organization of intersectoral cooperation would require the active involvement of all technical ministries in charge of providing and monitoring CWS services, particularly the Ministry of Public Works (or equivalent), the main CWS agencies and the Ministries of Public Health and Community Development (or equivalent); the community should play a major role in the process; support can be provided by external agencies.

Community involvement

32. The Consultative Group made the following recommendations:

- (a) permanent community involvement is a long term goal, which in the context of CWS development requires intersectoral action, involving in particular the Ministry of Health (in the context of integrated PHC programmes) and all Ministries concerned with Education, Local Government, Planning and Social Affairs (more specifically community development); the attainment of this long-term goal requires a phased approach, including a demonstration stage in the short term and gradual extension to full-scale programmes in the medium term;
- (b) in order to demonstrate the feasibility and benefits of community-based approaches, a pilot project should be undertaken; of particular importance is the selection of the project area according to specific demographic, socio-economic, technical, resources and public health criteria; external technical agencies can support this project identification and formulation process, which requires a detailed study;
- (c) the institutions (e.g. users' groups) and project personnel (e.g. facilitators) which are to operate at community level should be well identified, and adequate resources should be made available to them at the beginning of the project;
- (d) the medium-term phase should consist in an extension to a full scale of the improvements reached in pilot projects based on intersectoral cooperation and community involvement; this extension should take place gradually, after each previous project has been evaluated, and after having gathered all community-expressed priority needs and project requests; project selection should continue to be based on established public health, socio-economic and technical criteria;
- (e) the overall organization chart for the promotion and organization of community involvement should include a special CWS Programme Unit within the Ministry of Plan, deconcentrated at regional level, with interface with users' groups, facilitators and other community organizations.

Human resources development (HRD)

33. Besides being the most important component of national institutional development, HRD is regarded as the most critical issue, particularly in the less attractive positions which are offered in software (as opposed to construction) agencies, in rural areas, and in operation and maintenance (as opposed to construction of new works). The Consultative Group made the following recommendations:

- (a) CWS agencies, public health and other sector agencies, and specialized training institutions should form a group in charge of undertaking a needs survey, developing a programme, and organizing and evaluating training activities; the participation of external agencies could be required to support this development;
- (b) the review should include a survey of relevance of curricula to sector needs, a detailed task analysis of specific jobs, the reorientation of curricula, and a study of the interrelationships between sectors and institutions;
- (c) policy statements and legislation should be drafted to prepare for implementation of required changes; as these take place, job descriptions and performance standards, as well as personnel policy regulations should be reviewed with the objectives of minimizing political and other influences in selection and evaluation of staff, and improving efficiency and effectiveness.

Technology

34. The adoption of appropriate low-cost technology has important institutional implications, and requires the involvement of the main ministries and coordinating bodies concerned, with CWS agencies playing the major central role. The Consultative Group made the following recommendations:

- (a) technology selection should be preceded by a feasibility study of identified technical alternatives, giving appropriate weight to their operation, maintenance, public health, economic, financial, and also institutional implications;
- (b) because of the relevance of intersectoral considerations in this selection process, all sector agencies, particularly public utilities and government CWS divisions, the Ministry of Health and the Economic Planning Unit, and/or any Decade coordinating body such as the National Action Committee, should be involved;
- (c) support can be provided by Technical Support Teams (TST), the office of the RR/UNDP, the Technical Advisory Group (TAG) or similar groups engaged in research and appropriate technology, and external technical agencies for evaluation of the relevance and validity of the proposed technology, as well as organization of integrated primary health care development in order to provide maximum health benefits;
- (d) as in the case of community involvement, the benefits of appropriate technology should be demonstrated through pilot projects requiring the involvement of national CWS agencies, and technical cooperation from TAG or similar groups; the procedure for selection and implementation of such pilot projects is as previously described in the case of small-scale projects designed to enhance community involvement and demonstrate its benefits;
- (e) in the medium term, full-scale programmes can be implemented; they require surveys of sector conditions, the setting of national (or regional) objectives and goals, the selection of individual projects, the procurement of resources, and implementation by stages; besides CWS agencies, the involvement of higher levels of government, particularly the Planning Ministry, is required; external organizations (major development banks, bilateral and technical agencies) can be instrumental in supporting this development.

WHO's role in institutional development in CWS

35. The Consultative Group has identified various interventions in which WHO could play a useful role, particularly in connection with recommendations 18 (a): sector reviews, 24 (j): studies of resources transfers, 31 (b): organization of intersectoral cooperation, 32 (b): feasibility study of community-based approaches, 33 (a): HRD programmes, and 34 (c): evaluation of selected technology.

36. The participatory approach promoted by WHO should be intensified in institutional development, so that support can be provided to national agencies in the diagnosis of their problems, the search for solutions, and the implementation of required improvements⁽¹⁾. The Group also recalled that an essential role of external technical agencies such as WHO consists in the dissemination of information (e.g., case studies) and the promotion in a TCDC context of methods based on successful experiences.

37. Through the publication of guidelines, and by conducting seminars and workshops, WHO can also provide information and directions on evaluation procedures, how to maximize benefits to health, how to integrate CWS development in the framework of broader primary health care programmes, and other methods to be used by software providers; this information should be channelled, not only to government agencies, but also to their consultants and reference centres, and to international and bilateral financing agencies, for which institutional development is a critical issue in project appraisal.

(1) Programme of Institutional Development - Environmental Health Programme, by A. Gonima, PAHO/WHO, Washington D.C., April 1981.

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ESSENTIAL CHARACTERISTICS OF DECADE-ORIENTED INSTITUTIONS

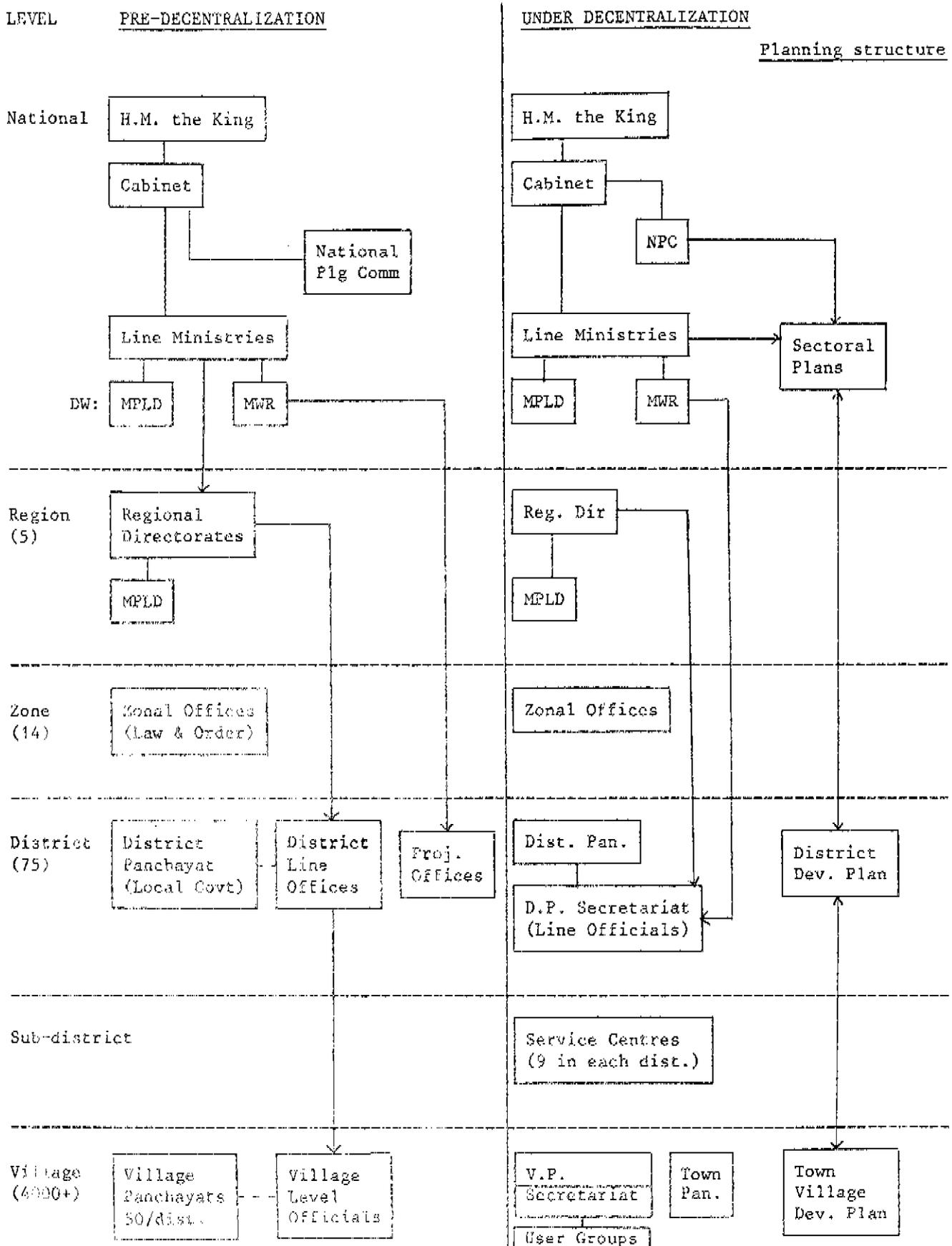
ANNEX II

CENTRAL/STATE LEVEL	FIRST REFERRAL LEVEL	COMMUNITY/LOCAL LEVEL
<ul style="list-style-type: none"> - Organizational capability to meet Decade targets using Decade approaches and proper hardware/software mix at project and programme level. - Optimum decentralization to maximize outreach. - Capability for planning, implementing, monitoring and evaluation of programmes. - Managerial capabilities and human resources development programmes to promote orientation of staff to Decade approaches, innovation and efficiency in programme implementation through use of appropriate technologies and procedures. - Ability to play leadership role and mechanisms to promote intra and inter-sectoral coordination. - Mechanisms to promote involvement of NGOs. - Ability to acquire, use, disseminate, information within organization and to the public. - Capability for research and development (including cost-benefit studies of investments). 	<ul style="list-style-type: none"> - Provision of technical support to communities in planning, implementing and monitoring CMS schemes. - Provision of materials, spares and logistic support. - Provision of back-up support for O&M of completed schemes. - Community health education; promotional work; training, support and guidance to village level health and other workers, and "facilitators". - Collaboration with support centres and networks of other sectors; linkage with PHC; involvement of NGOs. - Exchange of information and experiences between communities. 	<ul style="list-style-type: none"> - Availability of local institution (e.g., Village Council, Users' Body, etc.) willing to participate in planning, resources mobilization and management of their WSS facilities. - Availability of individuals or NGOs to act as "Facilitators" for assisting community in consultation and consensus development prior to new project implementation/rehabilitation/extension. - Organization of O&M by the local institution with back-up support from referral centre. - Availability of village level workers (artisans, etc.) for locally paid work. - Availability of multi-functional village level health workers for health education and linkage with PHC.

ANNEX II

Source:
 IDWSSD National Institutional Development for Water Supply and Sanitation,
 Report of an Informal Consultation - 24 to 28 June 1985, WHO Regional Office
 for South-East Asia, New-Delhi.

NEPAL
INSTITUTIONAL STRUCTURE FOR LOCAL DEVELOPMENT



ANNEX III
COUNTRY PRESENTATIONS

A. Nepal: decentralization (presentation by Mr B.K. Shrestha)

1. Insufficient financial and manpower resources and inadequate infrastructure are important, but not critical issues in CWS development, especially in rural areas. The major constraint is institutional: CWS agencies have not been responsive to the needs of the people. They have been primarily concerned by their own technical performance. In the sequence "input-output-effect-impact", their main preoccupations have been to adjust input to budgetary allocations, and to maximize output in technical terms. This has led to the development of a "highly competent, however non-performing bureaucracy".
2. For effect and impact to be optimized, plans should be formulated at the level at which they are to be implemented:
 - (i) top-down planning should be replaced by a participatory approach: the community should be regarded as central rather than peripheral, i.e. it should control the delivery of services by agencies;
 - (ii) planning should be integrated (complementarity between sectors);
 - (iii) domestic savings should be mobilized to supplement government allocations;
 - (iv) institutional development should focus on improving the outreach capacity of government, and increasing the reaching out capacity of the people.
3. Effective decentralization of CWS agencies should therefore involve deconcentration of the agencies and devolution of authority to communities. This is currently being tried in CWS and other sectors in Nepal, with a view to attaining a self-sustained development (Decentralization Act, 1982).
4. The following three new structures are being implemented:
 - (i) Secretariat of the District Panchayat, composed of line officials with directives from line ministries but reporting to Local Government authorities at District level: development is oriented from this level on the basis of indicative planning figures from line ministries;
 - (ii) Service Centres, which are multisectoral and serve as first referral structures (interface between communities and local agencies, at sub-district level);
 - (iii) User Groups: their constitution is mandatory for any local project.
5. The need to strengthen recipient bodies has been recognized, as evidenced by the creation of District Panchayat secretariats (deconcentration), and interface between user groups and service centres (devolution, referral). It is also important to reinforce central planning to deal adequately with multiple local requests, particularly in rural CWS (programmes include numerous small projects).

MALAYSIA
INTERSECTORAL ACTION
(PWDs and Ministry of Health)

ANNEX III
CHART II

	Organization of Ministry of Health Malaysia (relating to Env. San. Sector)	Organization of Public Works Dept (relating to Water Supply Sector)	
National	<p style="text-align: center;">Minister of Health Secretary General Director-General of Health Malaysia</p> <hr style="width: 100%;"/> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">Dir. of Hlth Serv.</div> <div style="text-align: center;">Dir of Eng. Serv.</div> <div style="text-align: center;">Dir. of Hosp. Serv.</div> </div>	<p style="text-align: center;">Minister of Pub. Works Secretary-General Director-General of Pub. Works P. Malaysia</p> <hr style="width: 100%;"/> <div style="text-align: center;">Dir. of water supplies</div>	For States with Water Authority only
State	<p style="text-align: center;">Director of Med. & Health Services</p> <hr style="width: 100%;"/> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">Deputy Dir. (Health)</div> <div style="text-align: center;">Deputy Dir. (Hospital)</div> </div> <hr style="width: 100%;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>P.H. Engr. Insp.</p> <p>Chief Matron P.H. Insp.</p> </div> <div style="width: 45%;"> <p>Nutr. Off.</p> <p>MCH Off.</p> <p>Epid. Off. UBDCP Off.</p> </div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">Director of Pub. Works</div> <div style="text-align: center;">Director of Water Supplies</div> </div>	Water Authority
District	<p style="text-align: center;">D I S T R I C T M E D I C A L O F F I C E R</p> <p style="text-align: center;">Medical Officer of Health</p> <hr style="width: 100%;"/> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">Sr P.H. Insp.</div> <div style="text-align: center;">Sister</div> <div style="text-align: center;">M.D. i/e. O.P.D.</div> </div> <hr style="width: 100%;"/> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">H.I. Env. San.</div> <div style="text-align: center;">H.I. FQC</div> <div style="text-align: center;">H.I. CDC</div> <div style="text-align: center;">H.I. Mobile W/S team</div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">District Works Engineer</div> <div style="text-align: center;">District Water Supply Eng.</div> </div> <hr style="width: 100%;"/> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">Tech. Asst. Technicians</div> <div style="text-align: center;">Tech. Asst Technicians</div> </div>	
Village	<p style="text-align: center;">Health Centre for Group of 5 to 20 villages</p> <hr style="width: 100%;"/> <p style="text-align: center;">Medical Officer i/c.</p> <hr style="width: 100%;"/> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">H.I. P.H.O. + San. Lab.</div> <div style="text-align: center;">P.H. Nurse P.H.O.</div> </div> <hr style="width: 100%;"/> <p style="text-align: center;">Midwife Clinics</p>		

8. Malaysia: intersectoral action (presentation by Mr Lum Weng Kee)

1. Malaysia has a federal system of government, and responsibilities for the provision of CWS services are shared between federal and State agencies. The Ministry of Health, which is a federal agency, assists those communities which are not serviced by State Public Works Departments (PWDs) or local authorities in the construction and operation and maintenance of drinking water supply facilities.

2. This type of institutional arrangement exists in other countries and regions where it is generally more formalized. In Malaysia, although intersectoral coordination is largely lacking, the rapid growth in coverage is actually the result of intersectoral action.

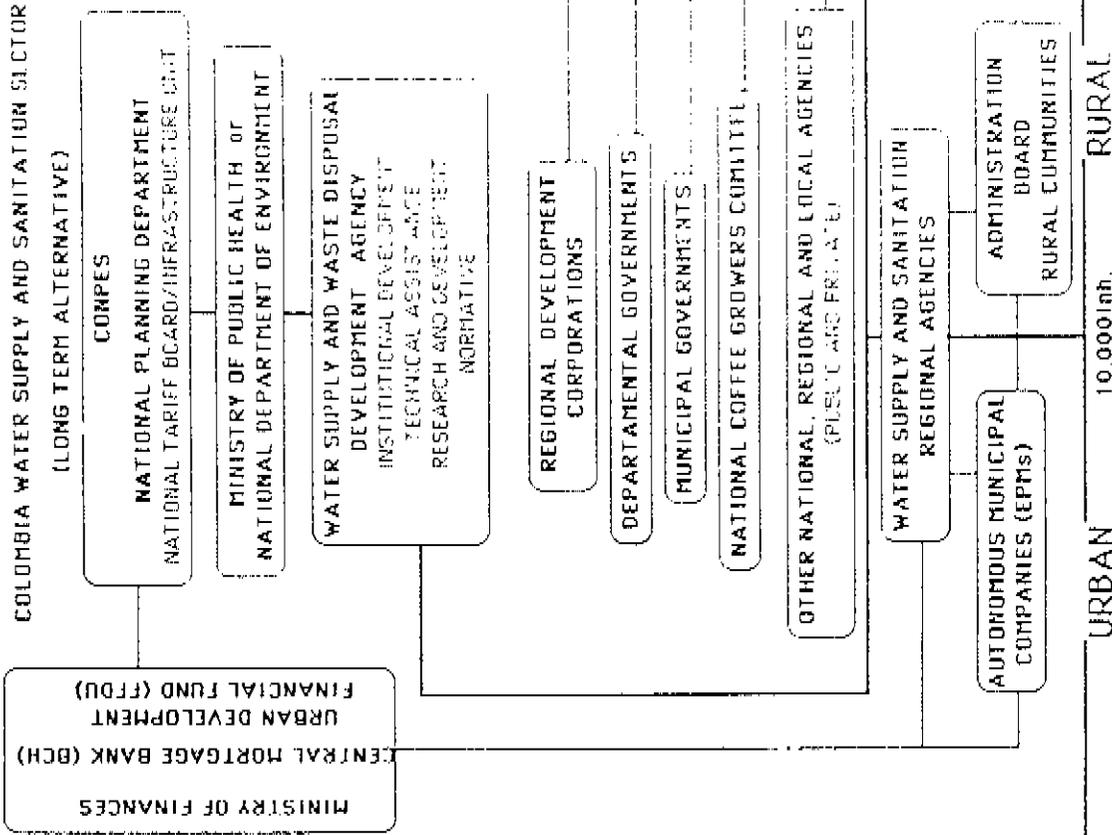
3. Although committees have been created to identify areas where the two main sector agencies overlap, and to arbitrate conflicts, interagency coordination is very limited. Also, since government is the sole provider of CWS services, including operation and maintenance, incentives are lacking to enhance community motivation; this exists in other sectors, in which the participation of the community in development efforts is actually rewarded.

4. The following required improvements have been identified:

- (i) to increase community awareness of needs, and community involvement in CWS, thereby decreasing dependence on PWDs and other State government agencies; this requires extension of the programmes of the Ministry of Health, and coordination between these programmes and those of PWDs;
- (ii) to entrust a single agency with the responsibility to integrate CWS planning and to monitor overall progress;
- (iii) to enhance community involvement in the determination of the type of system most suitable for local needs; at present, the decision on the level of service (i.e. whether PWDs- or community-based) is based on availability of financial resources for PWDs' interventions and on political commitments, rather than on the community's ability and willingness to use the system;
- (iv) to support the municipal authorities in their effort to extend and monitor services in those subsectors which lag behind, e.g. sanitation in rapidly expanding urban poor districts.

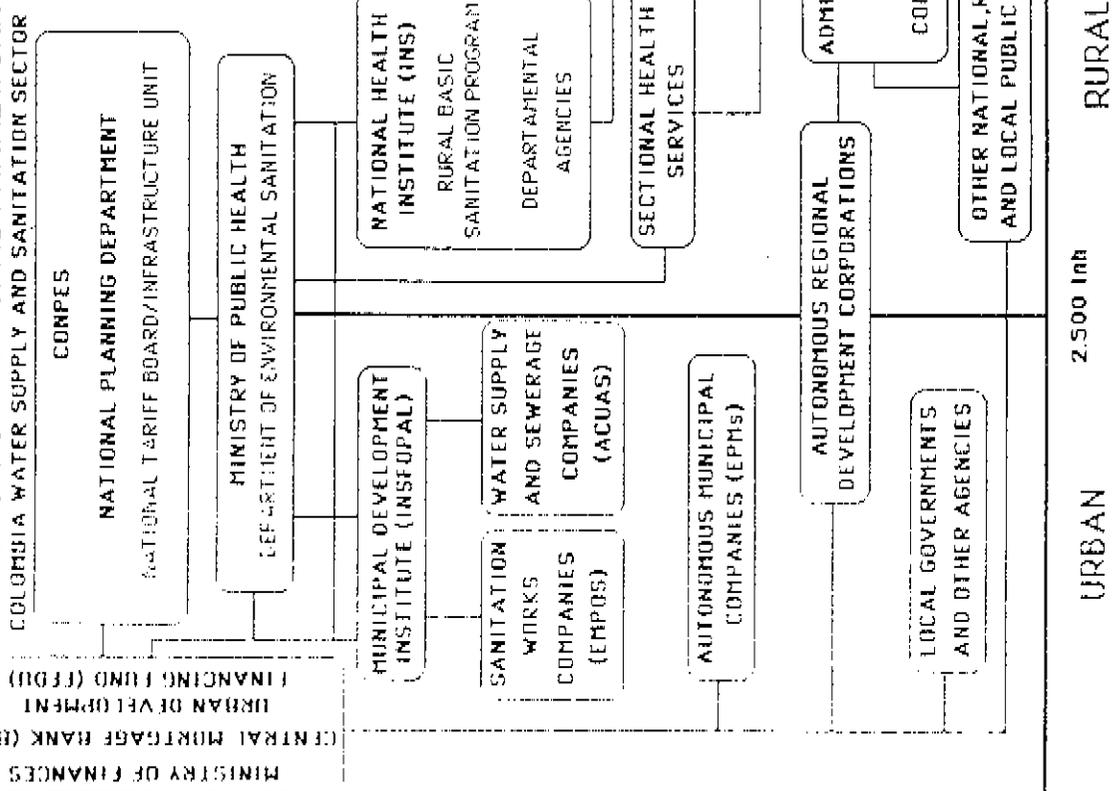
5. Both intra- and intersectoral cooperation happen in Malaysia, although coordination has not been the subject of specific regulations or efforts. The model may well lend itself to replication in other countries. The achievements are rather impressive and this type of institutional arrangement could therefore be promoted.

INSTITUTIONAL ADJUSTMENT PLAN



ANNEX III
CHART III

ACTUAL INSTITUTIONAL FRAMEWORK



C. Colombia: a changing profile (presentation by Mr E. Angel)

1. While sanitation lags behind, the development of drinking water supply has been satisfactory in Colombia, particularly through autonomous river basin agencies dealing with water resources as a whole. The main constraints are related to sector fragmentation between a large number of agencies at various levels of government, and a comparatively low priority ranking of CWS improvements by communities (water has third priority after roads and electricity). Education is required to convince people that access to safe water is a first step towards health.

2. Institutional fragmentation results in the absence of an integrated view of the sector: this however should be entirely under control of the Ministry of Health. CWS is actually a second priority in this Ministry, which must deal with many other issues. As a result of centralization, communities expect government assistance, and it is difficult to enhance community involvement in sector activities. The sector is locked into a rigid institutional framework, which is hampered by difficulties in software delivery, and need for structural as well as financial improvements. A major issue is related to the difficulty to abolish existing structures and mechanisms.

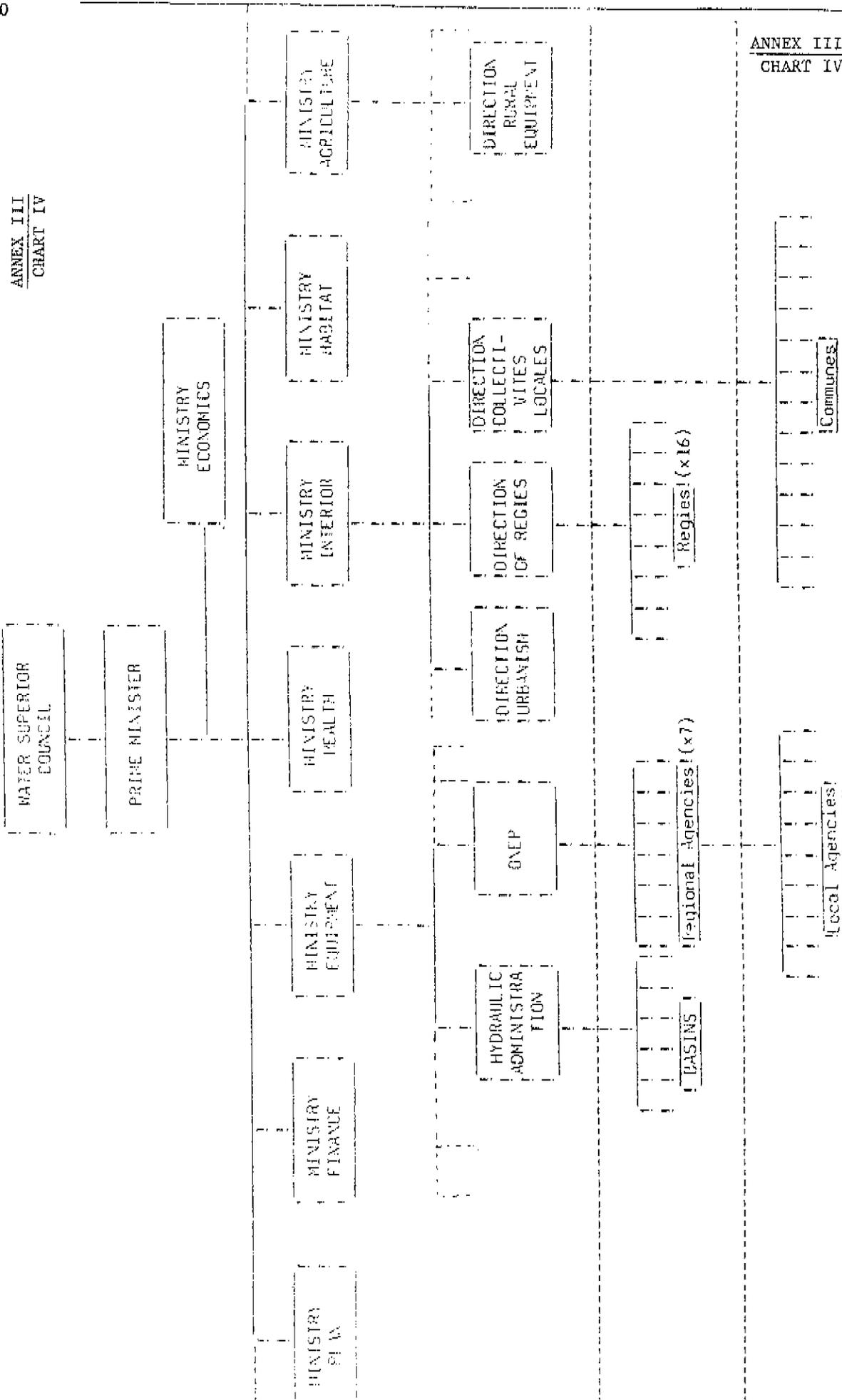
3. The structural constraints identified in CWS in Colombia are related to the limited outreach of central planning and the lack of information systems and institutions for monitoring progress. The sector appears as excessively centralized in vertical terms, while it is horizontally divided between many agencies. The ideal institutional structure which has been recently defined as a long-range objective for national institutional development in Colombia has the following main characteristics:

- (i) the community is defined as the supporting structure for the entire institutional frame, characterized by extensive decentralization;
- (ii) sector targets are integrated into overall regional and urban development objectives;
- (iii) large communities form local services companies;
- (iv) rural areas form administrative boards;
- (v) communities cooperate horizontally so that support is provided by stronger structures, such as urban companies, to development in the weaker zones;
- (vi) a coordinating body is envisaged at regional level:
 - . to advise municipal and rural communities,
 - . to channel funds,
 - . to monitor the management of CWS services,
 - . to promote horizontal cooperation;
 - . to participate in general planning for optimization of capacity,
 - . to act as linkage agency between national and local levels;
- (vii) at national level, the separation of technical and financial functions is regarded as absolutely necessary, with the financial functions being assigned to a high specialized entity of the financial sector.

MINISTÈRE
WATER SUPPLY SECTOR
ORGANISATIONAL STRUCTURE

ANNEX III
CHART IV

MINISTÈRE
INSTITUTIONAL FRAMEWORK OF THE CWS SECTOR



D. Morocco: limits of decentralization (presentations by Messrs El Alaoui and El Filali)

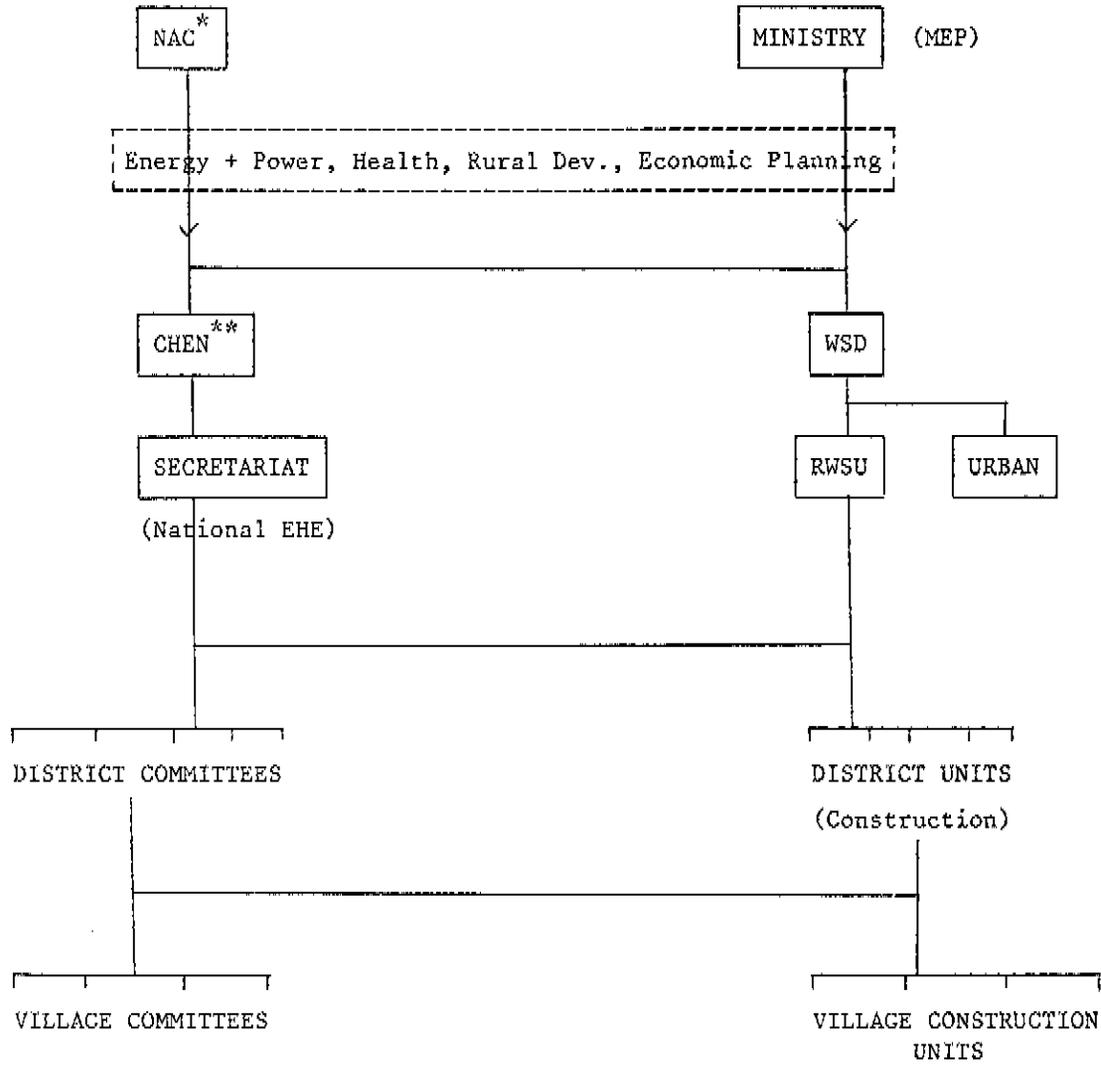
1. The National Drinking Water Supply Organization (ONEP) has seen its role extended from planning for large urban areas to actually supplying water to small communities. Its financial operations are now hampered as the agency must go beyond the limits of its deconcentration potential. These difficulties are compounded by conflicts of interest in resources allocation (especially between CWS and irrigation needs), by the fact that sanitation lags behind water supply, by the excessive fragmentation of sector responsibilities and activities (as a result of strong communal powers), and because CWS accounts for only a small part of the activities of the Ministries of Interior and Health. ONEP must therefore fill gaps, without however having competence to cover the entire sector.

2. A multisectoral pilot project has recently been identified to foster CWS development at provincial level with adequate support from ONEP and other central authorities, at the limit of their deconcentration potential. However, such projects are seen as difficult to implement, particularly because of inadequate coordination at central as well as regional levels. They would have the merit of strengthening regional structures (as first referral level) and increasing self-reliance in CWS development throughout the rural part of Central Morocco.

3. Despite the promotion of intersectoral cooperation through such central agencies as the National Action Committee (NAC) or the High Water Council, rural water supply development in the provinces is difficult to organize centrally. It requires the active participation of at least five ministries or agencies (Equipment/ONEP; Equipment/Direction of Hydraulic Works; Agriculture; Interior/communities/régies; Public Health): for each one of these ministries or agencies, rural water supply represents a difficult challenge with few incentives; extension of sanitation to rural areas and small towns is even less attractive and more difficult to achieve.

4. CWS development in rural areas has also been the subject of severe financial constraints. The allocation of funds to the sector depends to a large extent on the level at which financial and technical agencies can cooperate. For this reason, the Fonds d'Equipement Communal (FEC), which finances community development through loans, is currently studying the feasibility and potential benefits of decentralization for its own structures.

SIERRA LEONE
ORGANIZATIONAL STRUCTURE



* National Action Committee (Inter-ministerial)

** Council of Health Education + Nutrition (Inter-ministerial)

Sierra Leone: an integrated approach

1. As a result of government commitment to the attainment of the Water and Sanitation Decade goals, the situation of the numerous rural communities which had been hitherto unserved became a matter of official concern, and resources were provided for remedial measures. In the context of a UNDP-sponsored technical cooperation project, a Rural Water Supply Unit (RWSU) has been established and technically organized on the basis of a district level pilot project.

2. The main lesson learnt from this project has been that construction of new works is not by itself an all-inclusive solution to sector problems. Closely related activities such as environmental education, water quality surveillance, rural sanitation and maintenance have been brought together into what is now termed "the integrated approach" involving several agencies and personnel of different sectors, particularly the Ministry of Health which is responsible for environmental sanitation. Efforts have also been made to improve water supplies as components of integrated agricultural development projects coordinated by the Ministry of Agriculture and Forestry.

3. The RWSU, which is thinly staffed at both professional and sub-professional levels is responsible for coordinating, monitoring and assisting in the implementation of five large-scale projects; two other projects have been approved and are scheduled for implementation in 1986. These water supply development activities include the provision of improved wells with community involvement, and this necessarily requires some health education; this fully justifies the participation of health authorities, in programmes which are organized and managed by RWSU, and partly supported by UNDP, UNICEF, WHO and some non-governmental organizations like CARE or the Catholic Relief Services. The government has formed a National Action Committee, consisting of members from governmental and non-governmental agencies, to coordinate the activities of the sector.

4. The present trend is to decentralize some activities which have been recognized as major elements of CWS development. This implies maximum use of deconcentrated software providers for education, surveillance and maintenance tasks, and motivation and training of community members so that they can by themselves take care of the installations. Training can be done by CWS and public health staff, for instance through workshops at community level; primary school teachers can also be involved through a series of in-service training activities at the Teachers Training Colleges.

5. The RWSU is fully committed to the promotion of the integrated approach as described above. The implementation of any new facility is preceded by an environmental education programme, which continues at village level throughout construction and after completion of the works. Members of the environmental health team are trained to carry out simple water quality tests, which are performed on the source of water before construction begins, and at regular intervals after completion. Rural sanitation is also developed by the construction of the VIP latrine which is adapted to the local conditions; the community is encouraged to participate as the units are built for individual households.

6. Maintenance systems are developed at the village level; as technology choices are based on simplicity of maintenance, members of the community can take care of the facilities without much outside assistance. The entire organization of CWS in Sierra Leone is oriented towards the activation of all potential resources at village and district levels, while the more central agencies remain thin and rely on intersectoral action in CWS development.

F. Some common features in the design of institutional arrangements

1. Although the organization of the CWS sector is country-specific and cannot be subject to regional or global generalizations, some common features emerge from the various organization charts provided by the members of the Consultative Group in support of their respective presentations.

2. The similarities between these charts probably reflect common preoccupations; institutional arrangements should be: (i) Decade-oriented; (ii) economically sound; (iii) conveniently integrated; (iv) sufficiently decentralized; (v) easy to implement; (vi) intersectoral; and (vii) feasible.

3. It can be observed for instance that the institutional structure of CWS in Nepal after the Decentralization Act, 1982, and its By-Laws, 1984, fully meets criteria: (i) at all levels; (iii) particularly at the levels of the Secretariat of the District Panchayat, of the Service Centres and of the User Groups; (iv) and (vi) at all levels. However, it may take several years to establish the correspondance with criteria (ii), (v) and (vii), which are related to feasibility aspects.

4. In Malaysia, criteria (i), (iv) and (vi) essentially apply to that part of the sector which is under the responsibility of the Ministry of Health, while the other criteria are generally met by PWDs' operations; this is probably the reason why the two subsectors can develop in harmony, with good results in terms of progress in coverage.

5. In Colombia, the long-term alternative which is recommended by the Institutional Adjustment Plan corresponds at least to criteria (i), (iii), (iv) and (vi), and there are good reasons to believe that the feasibility criteria would also be met. This will however require important behavioral changes at local level, since the community, which was previously a passive recipient of government-provided supplies, should become the basis of all development in CWS.

6. The Morocco case illustrates some of the shortcomings of the model, as only some of the criteria are met, and however coverage is being extended at a rapid rate. CWS institutions are generally Decade-oriented (i) at central and first referral levels. However, community self-reliance is not developed in the form generally recommended. The institutional framework is economically sound (ii), but only so far as sector agencies do not go beyond the limits of their deconcentration potential (iv). There are also difficulties in integration (iii) and in intersectoral action (vi). Institutional changes, such as the creation of a National Action Committee, have proved difficult to implement (v), and in some cases they were not feasible (vii).

7. In Sierra Leone, the integrated approach involving the simultaneous intervention of hardware and software providers corresponds to criteria (i), (iii), (iv) and (vi). As in the case of Nepal, it will probably take some time to establish the correspondance of the model with feasibility criteria (ii), (v) and (vii).

For further information, please
write to:
World Health Organization
Community Water Supply and
Sanitation Unit
Division of Environmental Health
CH - 1211 Geneva 27