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Public Participation Techniques and Methodologies: A Résumé

Dana Vindasius

SOCIAL SCIENCE SERIES NO. 12
(Résumé en français)

INLAND WATERS DIRECTORATE,
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Abstract

This report stems from a key preliminary phase of research and from action projects concerning public participation in the planning process. A review of past experience in stimulating and using public participation in various forms of planning is considered to identify the lessons which can be learned from this experience so that a viable public participation programme can be formulated.

Twelve cases are reviewed; where possible, successful and less successful public participation programmes are compared and contrasted.

The role of public participation in planning and what public participation involves, i.e., various techniques and mechanisms and how they should be employed, are examined. Subsequently a general model for public participation programmes is presented.

Résumé

Le présent rapport est le résultat d'une étape préliminaire importante dans les projets de recherches et d'action visant la participation du public au processus de planification. On y fait une revue des expériences antérieures d'animation et de recours à la participation du public à diverses formes de planification, afin d'en cerner les leçons utiles, de façon à ce qu'on puisse établir un plan de participation du public qui soit viable.

On y traite douze cas, comparant dans la mesure du possible les plans de participation du public qui ont réussi et d'autres qui ont moins bien réussi.

Y sont examinés le rôle de la participation du public à la planification et les facteurs qu'il comporte, comme les diverses méthodes et mécanismes à employer et comment les utiliser. Par la suite, on expose un modèle général devant servir aux plans visant à la participation du public.

CHAPTER 1

A Selected Review of the Public Participation Experience in Canada and the United States

To develop some practical guidelines for future public involvement programmes in water management, a review of previous experiences in this area is necessary. Twelve case studies have been chosen for review largely on the basis of availability of information.

Only half of the case studies selected for review are directly concerned with water resource problems. There are various reasons for this. First, it is difficult to obtain an adequate amount of data on the public participation components of water planning programmes, since it is a whole new area in the water management field. As a result, most of the projects with definitive public involvement programmes, including evaluation phases, are not completed and data have not been released. Also, in the past, many water-oriented plans either neglected to consider public involvement or gave it very cursory treatment. This made these studies unsuitable for the purposes of this report. Finally, it was felt that planning efforts primarily concerned with socio-economic betterment, which also included public participation, might offer some important clues for establishing a viable public-involvement framework. Thus a number of these projects were included in the review.

The projects selected for discussion are the following: Delaware Estuary Study, Muskingham Watershed Conservancy District, Susquehanna River Basin, Friesland Land Consolidation Plan, Tennessee Valley Authority, Bureau d'Aménagement de L'Est du Québec (BAEQ), Fogo Island Improvement Committee, Conseil Régional d'Aménagement du Nord-Ouest (CRANO), Conseil Régional d'Aménagement du Nord du Nouveau-Brunswick-Northern Regional Development Council (CRAN-NRDC), Mactaquac Regional Development Plan, Cedar Lake Project and Brandywine Basin Plan.

THE DELAWARE ESTUARY

The Delaware Estuary Comprehensive Study (DECS) was set up to carry out a detailed analysis of pollution in the Delaware Estuary. The area in question encompasses 12,765 square miles in the states of Pennsylvania, New Jersey, New York and Delaware, an industrialized region of 6,000,000 persons. The questions to be answered were: what is the cause of pollution? who is responsible for it? what can be done? how much will it cost? The answers to these questions would form the basis for a comprehensive programme to solve the pollution problem and to satisfy reasonably the various interests.

The study was undertaken at the request of existing state and interstate pollution control agencies. It was initiated in 1961 by the Water Supply and Pollution Control Division of the Public Health Service and was completed by its successor agency, the Federal Water Pollution Control Administration, in 1966. The actual work was carried out under the Delaware River Basin Commission (DRBC).

In the formulation of the objectives for the plan, it was considered essential to take account of local interests and to formulate a plan that was satisfactory to them. To consult the various interests in the basin, three committees were established by the planners of DECS (Fig. 1).

Of the three committees, the Water Use Advisory Committee served as the focal point for public input. This committee was made up of representatives of several hundred citizens' associations (general and special interest), as well as of industry and local government.

The members of the Water Use Advisory Committee were asked about swimming areas, fishing locations, community attitudes on withdrawal of water from the estuary, and industrial attitudes with regard to water use. The members were asked also to suggest water quality criteria for the various water uses. Based on their responses, the possible alternatives for water quality improvement were reduced to five sets of water use and water quality objectives.

These sets of objectives, summarized by the DECS staff, were then resubmitted to all three advisory committees, which met to select one set of water use and water quality standards or criteria. Thus consensus about pollution solutions was achieved through a joint process of problem analysis and planning involvement among as many interested organizations as could be found. Levels of water quality and the means of attaining them were progressively related by DECS staff to the water use requirements or desires of the interest groups, although at times the technical complexities of the subject led to low levels of public feedback. Nevertheless, because of the process involved, each interest group came to perceive its own goals in relation to the goals of other interests. This provided a new basis of common understanding from which a consensus was ultimately attained.

After the comprehensive study was completed, the

5 members from each of the four states in the valley (20)

1 member of the state senate (4)

1 from the lower house legislature (4)

1 representing the governor (4)

1 from a planning agency (4)

1 chosen at large by the Commission as a whole (1)

(Total of 37 members)

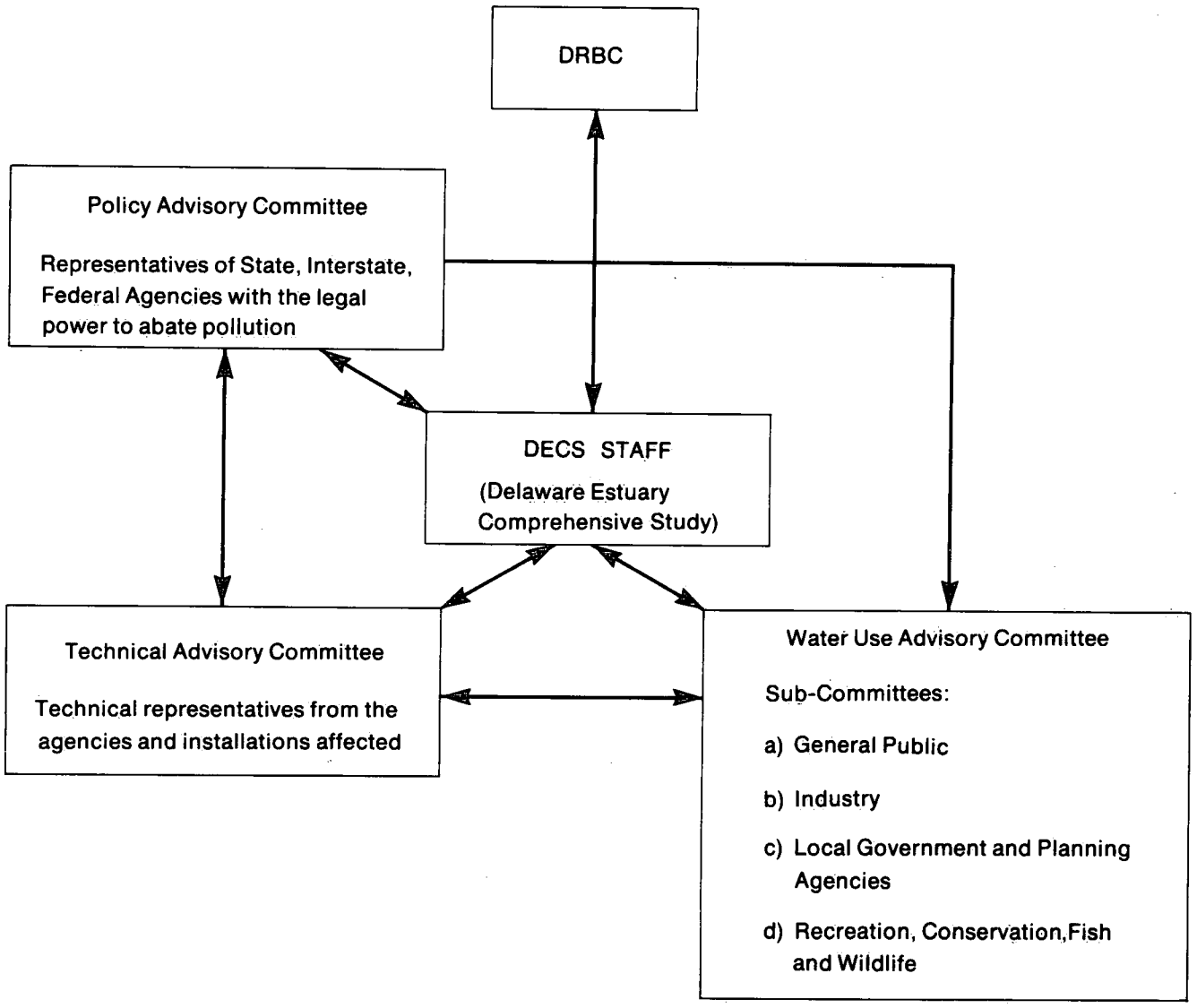


Figure 1. Delaware River Basin Commission (DRBC).

Delaware River Basin Commission established three *ad hoc* committees consisting of representatives of industry and local government. A public hearing is held each year to incorporate into the programme representations from all interested parties. These three *ad hoc* committees were to review and define the financial incentives that would be effective in enabling industry to meet the timetable, review the best locations for establishing regional sewage treatment plants and re-examine the possibilities of seasonal variation in treatment requirements.

The Water Resources Association of the Delaware River Basin has provided the pressure for continuing the links between DRBC and the general public. The Association is a non-profit, non-political, impartial federation of 600 organizations and individuals in the Delaware River Basin. It stimulates public interest in the water problems of the study area and provides the citizens with the means to appraise intelligently the proposals for developing and using the water resources of the Delaware River System.

MUSKINGHAM WATERSHED CONSERVANCY DISTRICT (MWCD)

Muskingham Basin (8,038 square miles) is located in southeastern Ohio; in 1950, the population was one million. Many years ago it was an agricultural area but because of excessive runoffs and the depletion of the top soil, productivity declined. As flood plains became more densely populated, large volumes of industrial and domestic waste were added to silt-loaded streams. Pollution became more serious and water supplies became overtaxed. The Muskingham Watershed Conservancy District (MWCD) was designed to formulate a comprehensive programme for flood control, conservation and development of water and other natural resources, including river regulation, purification of streams, irrigation, prevention of soil erosion, and reforestation.

The impetus for the project resulted from two events: a major flood (1913) and a severe drought (1930). These events led the residents of the watershed to believe that only a comprehensive control system for the entire watershed would solve their water problems. As a result, the Muskingham Watershed Conservancy District was formed in 1933, under the Ohio Conservancy Act, which allowed counties to join together in special administrative and tax districts for the purpose of flood control (Fig. 2).

The Muskingham Watershed Conservancy District is headed by a conservancy court and a board of directors. The court, consisting of one common pleas court judge from each court in the district, appoints three directors for staggered terms of three years each. Initially, the board was

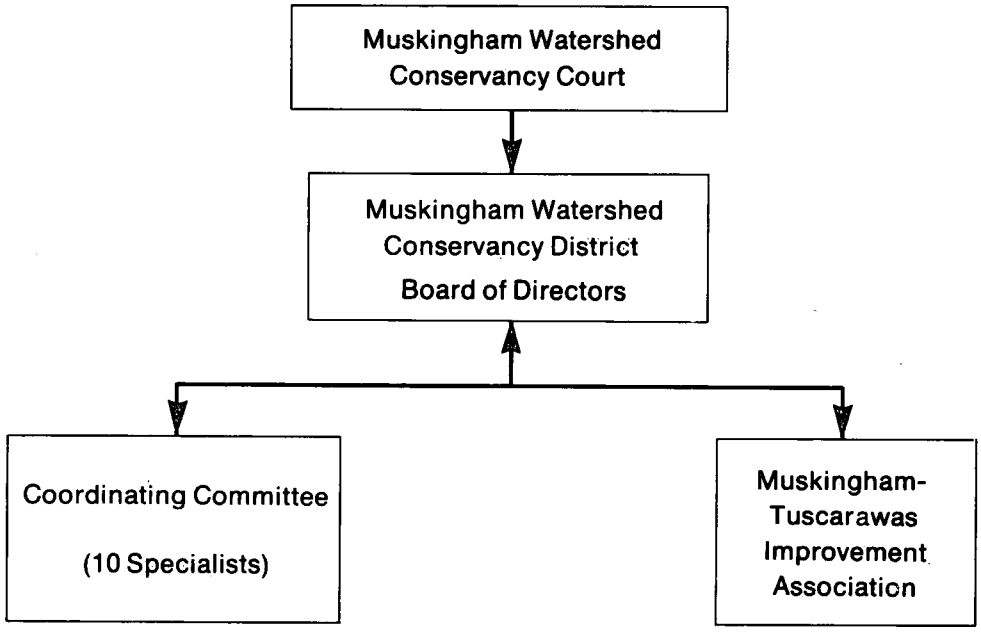


Figure 2. Muskingham Watershed Conservancy District (MWCD).

responsible for directing the affairs of the district, subject to general policy direction and supervision of the conservancy court. The board was specifically responsible for preparing the official plan for improvements, publishing and hearing objections to the official plan, adopting the official plan and recommending its adoption by the conservancy court. In addition it was responsible for constructing, maintaining and operating all works.

Public input came through four channels. Two freeholders were members of the board of directors. Local interested parties and organizations formed the Muskingham-Tuscarawas Improvement Association, which made recommendations to the board. A provision was made for hearings before the conservancy court on any specific objections to the official plan adopted by the board. The MWCD, the local independent agency, coordinated all planning and implementation actions.

The project itself was entirely grass roots in origin. The MWCD people set the goals of their project and decided upon the means to implement them. When it became apparent that they could not meet the financial costs, the federal and state agencies were requested to give assistance. The political realities were such that when the government gave financial aid, it also expected to partake in planning and implementation. The MWCD accommodated itself to this new turn of events and emphasized its *coordinating* role for the various projects. This involved drawing up a plan for the district and overseeing the development of the resources. The MWCD held a position of leadership among the people of the basin as a result of programmes of public education in watershed problems, potentialities and needs.

The flood control programme was taken over by the U.S. Army Corps of Engineers and, to initiate erosion control and reforestation work, the MWCD developed cooperative programmes with various federal agencies – Works Progress Administration, Civil Conservation Corps, Soil Conservation Service, National Parks Service and Forest Service.

There was a good example of *people supremacy* with regard to flood control problems. The Army Corps of Engineers wanted to build one big dam on the main stream. This would have caused extensive flooding, loss of land, relocation. The people held firm to their plan and as a result, a series of smaller dams were erected on the tributaries of the Muskingham.

In the beginning, public reaction and support was very enthusiastic; people contributed time and ideas to formulate the plan and also gave financial support in the form of increased taxes, even in the dismal, depressed 1930's. The disregard of local participation by federal policies and programmes and the change in roles for MWCD, however, did little to sustain the original involvement. In the early years, the job of analysing the basin's land and water problems, of following the progress to their solution and of pointing the way to better action, received in-depth attention from the MWCD. Later, failure to remain aware of basin-wide problems led to loss of leadership in the watershed community and weakened its position among agencies. The coordinating role tended to change to the point where the MWCD took on the position of manager of reservoir properties. This tended to detract from the agency's involvement in comprehensive resource planning. For example, the expansion of federal and state programmes with regard to water pollution has resulted in the withdrawal of the MWCD from the pollution question in deference to higher levels of government.

Although disputes did occur occasionally, such as refusal to pay increased taxes for flood control when other similar projects in the country were federally supported (this dispute was finally settled to the taxpayer's satisfaction), generally speaking the project was a success. The basin is now free of floods and 22,000 acres of formerly unusable land have been reforested. The number of farms has been reduced (with a minimum of opposition) from 400 to 150 to ensure viable economic units. The MWCD has retained 65,000 acres of land around the reservoirs; the land is managed so that projects are self-supporting. The reservoirs themselves have become tourist attractions. It is important to note that by assuming the role of coordinator, the MWCD has preserved a certain amount of local control over policy, planning and development of projects.

SUSQUEHANNA RIVER BASIN PROJECT

The Susquehanna River Basin cuts through the states of New York, Pennsylvania and Maryland. In 1960, the total population for the study area was 5,269,260, of which 35% was located in the southwestern portion of the river basin. The area is quite heterogeneous in terms of physical, economic and population characteristics. The northern and eastern portions of the basin experience unemployment because of declining industries such as coal mining and rail industry. Agricultural activity, predominantly dairy farming, is concentrated in the northern half of the basin. The area of greatest economic activity and growth is the lower half of the basin where steel production, textile production and manufacturing of electrical equipment flourish.

The aim of the project – formulation of a comprehensive water resources plan for the Susquehanna Basin – breaks down into three main objectives:

(a) national economic efficiency,
(b) regional development, and
(c) environmental quality,

with the final plan based on the specific preferences of local citizens and containing a blend of projects embodying the three objectives.

After passage in 1962 of a Congressional resolution authorizing the preparation of a water resources plan, the Susquehanna River Basin Study Coordinating Committee

was formed to provide policy guidance and to coordinate the efforts of all participating agencies in producing the final plan.

The Coordinating Committee includes representatives from concerned federal agencies such as the Corps of Engineers, the Departments of Agriculture, Commerce, Health, Education and Welfare, Housing and Urban Development, Interior, the Federal Power Commission and also representatives from the three states in the basin – New York, Pennsylvania and Maryland.

The Coordinating Committee worked with and through Regional Planning Agencies to formulate the comprehensive water management plan for the area. Although some attempts were made by the U.S. Corps of Engineers to inform the public of the aims and objectives of the project, it was not until a few years later that the School of Natural Resources team from the University of Michigan was contracted to stimulate public awareness and involvement.

To inform people, the Public Information Subcommittee was established. Three forms of publication were used:

(a) a leaflet which was basically an information flyer,
(b) a bi-monthly newsletter to draw attention to activities, water-related problems and developments, and
(c) a colourful brochure which defined the role of the Basin Coordinating Committee.

To communicate with the public, the interested parties had to be identified. Usually these were the people who could affect or were affected by the water policy, those who had been active in past water controversies, and individuals recognized by others as being influential in the water resource field. Survey techniques were employed to find out what the people would like done and how they thought they could participate.

Regional planning workshops established for the purposes of community education and public expression of local preference were organized and coordinated by local or regional planning officials. State officials and advisors from the School of Natural Resources, University of Michigan, met with local leaders to help plan such workshops.

The workshops were small, approximately 50 people, to allow maximum contact between public, state and federal agency representatives. Questionnaires were filled out by the public representatives to determine their expectations regarding the meeting and also to focus their attention on the central issues of the meeting. After representatives of the coordinating committee explained the history of the project, the process of plan formation to that point and recommendations for the whole basin and specific proposals for the local region, the participants broke up into small groups to discuss key problems or key areas. Each discussion group included three or more of the federal or state technicians responsible for the technical studies. Visual aids were used. The discussion reconvened to hear summaries of discussions by each group and the questions and issues raised by the participants. After the meeting the participants answered another questionnaire about their reactions to the workshop. Later, the host local organizations published a summary report, which included the results of the end-of-meeting questionnaire.

As a result of the evaluation of the workshops, regional public information forums were established to provide detailed information on the effects of specific projects for the various areas of the basin. Work-rooms were set up prior to the information forums where technical study data were available to citizens. During the forum, one technician was present to answer questions and to help interpret or explain technical reports or other points of interest to the local people. Also, at that time a modified plan (a result of the workshop sessions) was presented for discussion and modification before final approval.

Although the final results of the project are not yet available, it is possible to point out several successful aspects of the programme as far as public participation is concerned.

The workshops and forums provided the public with technical data in understandable terms. Thus, the public had time and knowledge to attempt to influence the planning process and make changes in the tentative plan. Also, as a result of the workshops, the public began to associate faces with the agencies, and thus could call or write directly to individuals if they had questions.

The agency planners, by means of face-to-face contact with community residents, had been directly exposed to local feelings and problems and this made it easier to achieve a shared frame of reference.

Some 40 to 50 changes were made in the plan as a result of workshop sessions and another 19 or 20 as a result of the public forums. The agencies were responsive to the people and the latter, in turn, felt that they were part of the planning process.

TENNESSEE VALLEY AUTHORITY (TVA)

The area administered by the Tennessee Valley Authority includes both the watershed of the Tennessee River and an additional sizeable area served by the distributors of TVA electric power. In this sense, the Tennessee Valley region includes all of Tennessee, and parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina and Virginia. The region is some 92,000 square miles in extent and in 1950, the population was 5,912,000. Sixty-five per cent of the population was classed as rural.

Before the TVA was organized, the valley presented a picture of a typical, economically depressed region, with high unemployment, a low level of agricultural productivity and little industry.

The TVA was a government corporation provided for by the Norris-Muscle Shoals Bill of 1933 (Fig. 3). The

purpose of the TVA was to stimulate and provide guidance to local and state agencies in the balanced development of natural resources on a regional basis. Although there were a number of facets to the TVA programme, the primary areas of concern were the generation and distribution of electric power, regulation of the Tennessee River and its tributaries and the maximization of the economic development of agriculture and forest resources in the valley.

The TVA Board of Directors established general policies and programmes, appraised progress and results, approved major personnel appointments, purchases and budgets, and decided the TVA's basic organization. The Board appointed a general manager as its executive officer responsible for the direction and coordination of programmes, policies and decisions of the Board. He was advised by the General Counsel on legal matters. The General Counsel also served as Secretary to the Corporation.

The largest programme activities of the TVA, as measured in number of employees and dollar expenditures,

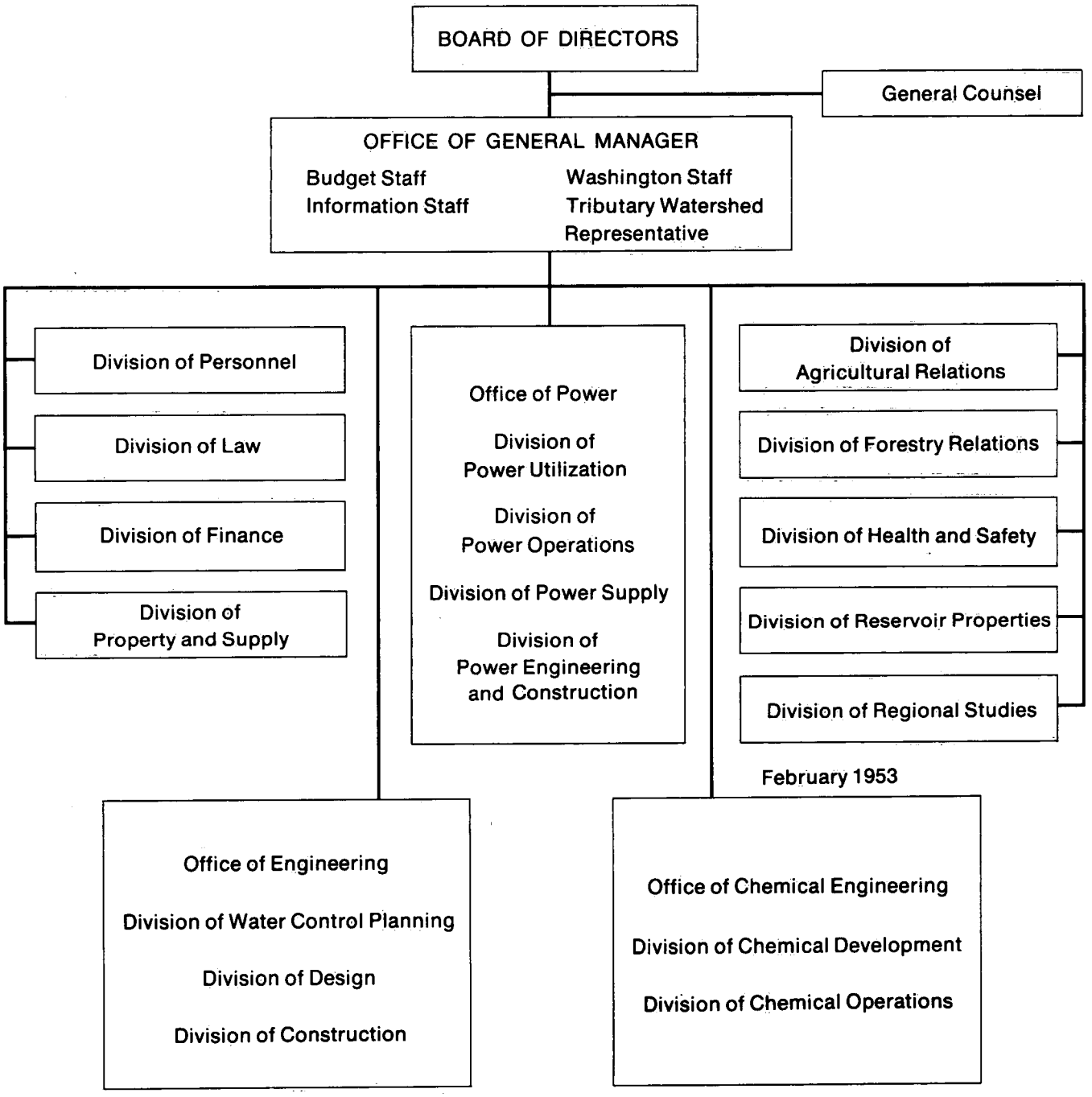


Figure 3. Tennessee Valley Authority.

were centered in three offices: Office of Engineering, Office of Power and Office of Chemical Engineering (fertilizer development).

This analysis deals mainly with the activities of the various divisions, especially Agricultural Relations and Forestry Relations (Fig. 4), since these were distinguished by the large number of contractual relationships with state and local governments and private organizations for experiments and demonstrations in resource development.

In 1933, the TVA began its work by first looking at the people of the area, rather than merely considering the economic and technical aspects. Some of the questions the TVA asked itself were: what was the people's stake in the development? What immediate steps could the TVA take to meet the needs of the people? How could the forces for development best be used? And how could the developing programme be made to serve the people all along the way?

Public participation was brought into the programme as a result of the role the TVA had decided to assume. The role was that of advisor and technical consultant. Administration was decentralized in the sense that the TVA followed the pattern of forming agreements with local agencies and with state and local governments. These were then responsible for carrying out the various programmes.

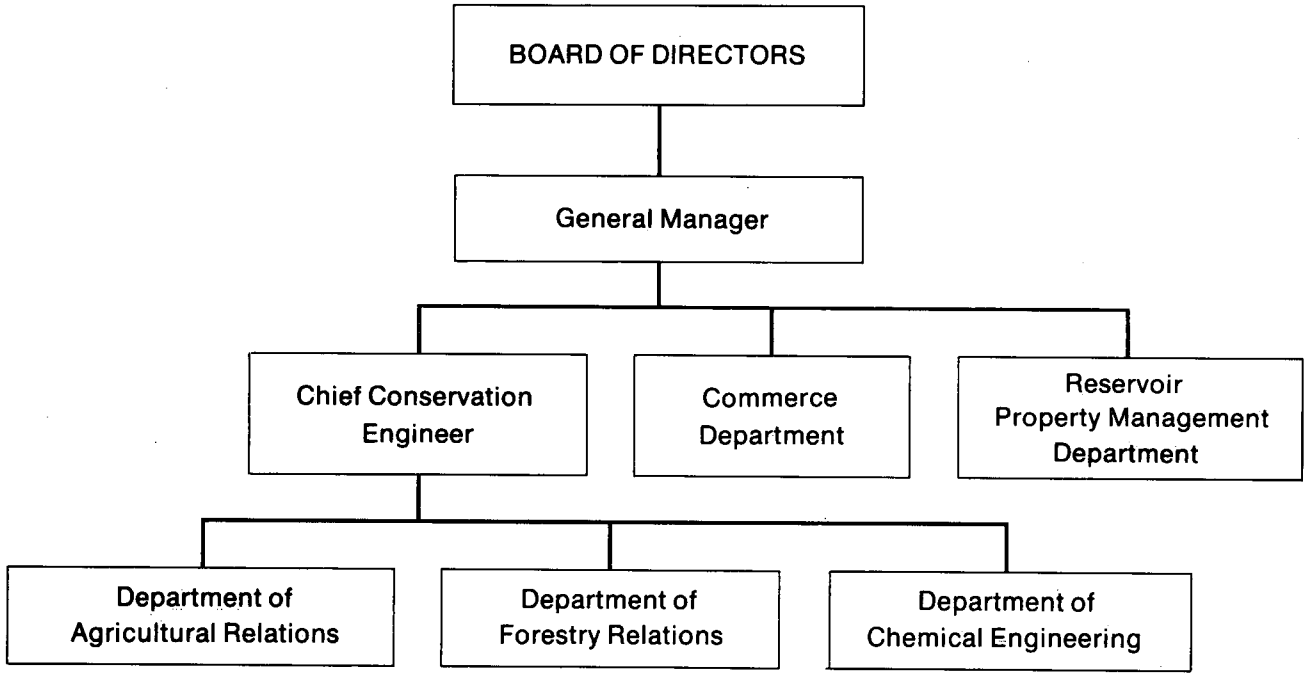
Administratively, public participation was involved mainly in the Divisions of Agricultural Relations, Forestry Relations and Reservoir Properties. It was primarily in these divisions that the technique of coopting local citizens, through voluntary associations and as individuals, into the administration of the various agricultural programmes, was widely developed during the 1930's.

The TVA, working through agencies of state government, supported the creation of voluntary citizens' groups to serve as official planning commissions for local communities. By 1943, 29 communities and planning commissions were cooperating in the planning programme under the guidance of the Regional Studies Department.

The link between the Authority and the local committees was the county agent from the federal Department of Agriculture Extension Services, who worked in cooperation with the land grant colleges. Although broad goals were set by the TVA people and the land grant colleges, specific goals and the means to achieve them were decided at the local level by the farmers' association with the county agent's guidance.

To involve the public, the primary approach used by the TVA was education-oriented. The county agent and his assistants from the Extension Service provided advice and guidance to the county soil associations, land use and land rent associations and other voluntary groups formed for the purpose of social and economic improvement. Community organizations were formed and they conducted resource surveys of their local areas to formulate a plan under which each farmer could participate in the soil conservation programme.

The initial phase of relocation for reservoir-affected



Source: TVA: The First Twenty Years (Knoxville: University of Alabama Press, 1956) P. 37.

Figure 4. Tennessee Valley Authority, Division of Agricultural Relations.

communities involved the staging of a series of conferences bringing together Authority and Extension officials, Extension field workers, county programme planning committees and subordinate county relocation committees. Also, a number of neighbourhood groups met with county agents. Relocation surveys were conducted by Extension Service officials and farmers. The Extension Service then sent an assistant county agent and a home demonstration worker into the affected counties. Throughout the period of construction and until the reservoir was filled, the workers remained in the area helping families with problems of relocation. Under this arrangement, the people of the area were dealing with an agency and with personnel they knew.

To overcome local skepticism, the TVA people and the Extension Service placed great importance on test demonstrations. For example, to stimulate local interest in the use of TVA fertilizer, a number of farmers were approached by the county agents and asked to cooperate by allowing their farms to be used as test cases. By 1942, area test demonstrations included about four per cent of all farms. This method worked very well since the farmers could actually see the results and thus appreciate the benefits of the fertilizer programme. Soil improvement associations served to requisition and distribute the fertilizer for their local areas and to select new demonstrators. These associations were encouraged to widen their activities into areas that gave the farmers a greater stake in their association, e.g., marketing.

A similar approach was used in the organization of electric power cooperatives. A publicity campaign pointed out the advantages of local power cooperatives. Next, various members of the TVA staff toured the watershed, speaking to the local people and demonstrating electrical gadgets and machinery which would make farming easier and more efficient. The communities which had adopted the practice of power cooperatives early in the programme were used as examples.

To facilitate regional unity, a number of *ad hoc* organizations and conferences were organized. For example, semi-annual conferences were held for the directors of the extension services, the personnel of agriculture experimental stations of the seven Valley states, the U.S. Department of Agriculture and the TVA. Such conferences helped the coordination of the vast, multifaceted programme.

Judging by the available information it seems the TVA was fairly successful both in resource development and public participation. It appears that the TVA saw planning as a process of finding agreement on the best and most feasible goals that individuals in private and public organizations could discover through an interchange of opinions. The process involved detailed definitions of programme goals and the identification of qualified and interested units to participate in the planning and implementation of the programmes. The units selected were usually organizations close to the grass roots, e.g., the Extension Service. According to this arrangement the TVA could not, in theory, initiate or conduct a programme different from those advocated by the institutions of the area. It is not apparent whether it ever attempted to do so.

The TVA made it a practice to concentrate the leadership and responsibility for programmes in people with social and economic roots in the watershed, thus legitimizing the TVA objectives, reducing opposition and mobilizing the support of the established institutions of the area. This approach also resulted in the implementation of programmes adapted to local conditions. Such an approach by the TVA strengthened the local institutions and ensured continuity in social and economic development. A large number of local agencies and associations were involved in both policy-forming and administrative functions. For example, in 1940, it was reported that approximately 15 per cent of the population was helping to plan and operate nine rural action programmes; community, county, and state committees of the Agricultural Adjustment Administration operated through some 3,000 county agricultural associations; farmers' associations aided in the administration of Farm Credit Administration loans; rehabilitation and tenant-purchase committees were organized by the Farm Security Administration; cooperatives were formed to deal with the Rural Electrification Administration; and the public participated on the governing boards of soil conservation districts.

Failures of the TVA with regard to public participation do not appear to be too conspicuous, considering that public participation was not stressed in that era as it is today. It seems necessary, however, to raise the following points. The recruitment of men whose attitudes and social commitments were framed by forces within the Valley to direct the programme had drawbacks as well as benefits. For example, there seemed to be little concern for the Negro and for the special problem of tenancy. It appears that there was no aid extended to the tenants.

The special relationship of the county agent to local government emphasizes the grass roots nature of the programme, but at the same time constitutes a force which tends to shape the TVA programme along lines governed by the pre-existing pattern of leadership and control in the area. Since the county agent obtained funds from the county government as well as from the state and federal governments, he often had to curry the favour of the entrenched interests in the area. The need to take account of vested interests and yet not let the programme be dominated by them, is a recurring problem in these projects.

FRIESLAND LAND CONSOLIDATION SCHEME, HOLLAND

The Friesland Land Consolidation Scheme project area

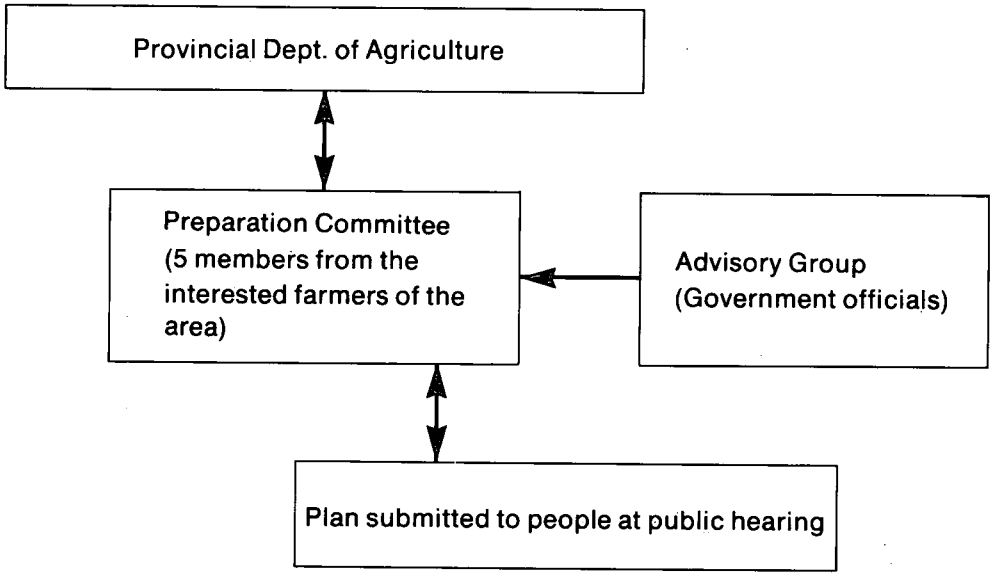
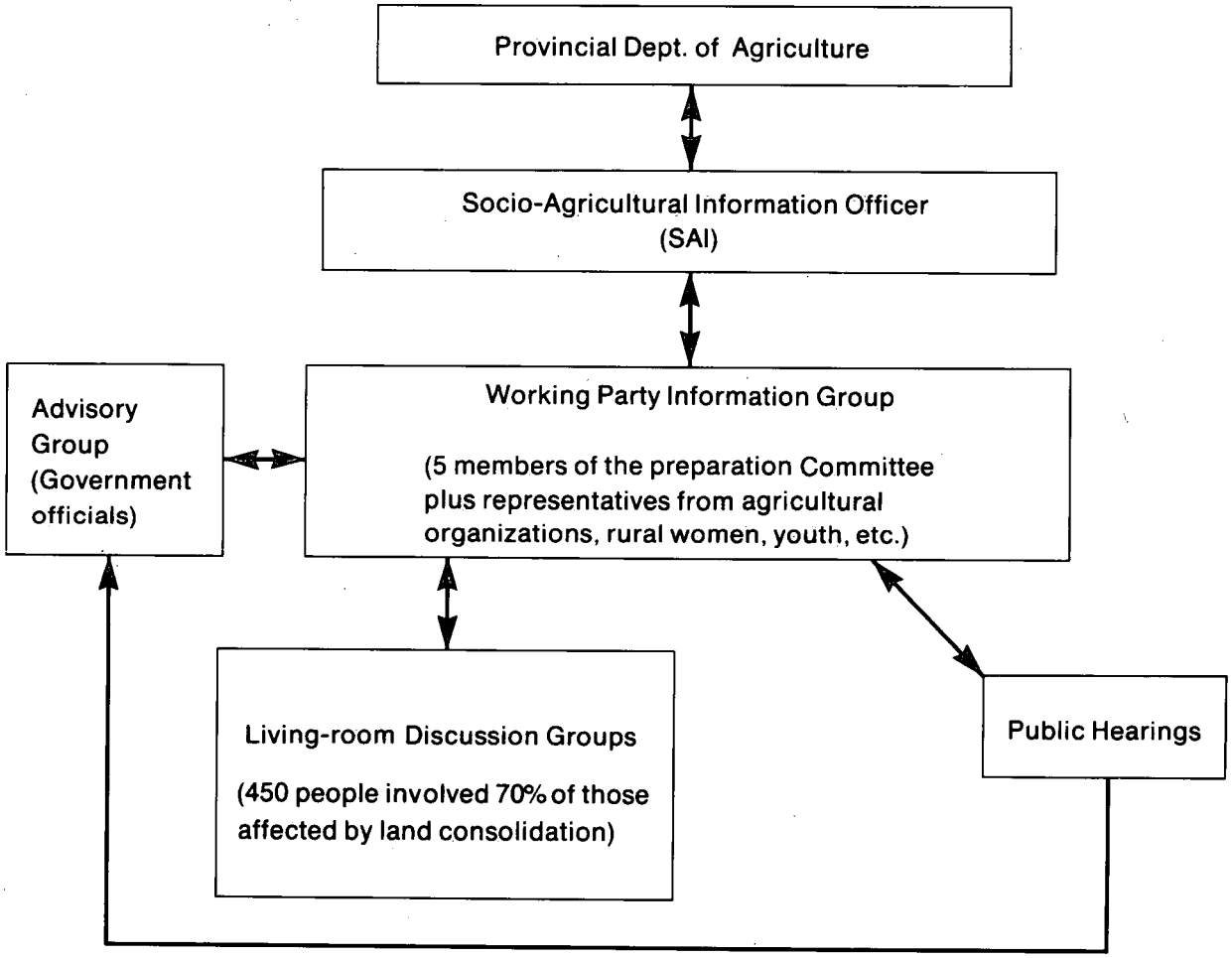


Figure 5. Old structure of Friesland Land Consolidation Scheme.



Source: The BAEQ: A case in Regional Planning with Participation of the Population, (Quebec: Laval University, 1971), Unpublished Paper, Page 4.

Figure 6. New structure of Friesland Land Consolidation Scheme.

consisted of the eastern part of Friesland province, an area of 1200 square miles. The population involved was mainly agricultural. The project was aimed at solving the problems of small, scattered farms and misuse of land because of poor drainage; it was felt that land consolidation would encourage a more rational and profitable use of available land. As well, the government had proposed the building of a highway through the area, necessitating the development of a road and waterway plan.

At the beginning of the project, for which the impetus came from the federal Land Consolidation Act, the administrative structure was as depicted in Figure 5 . Under this arrangement, a Preparation Committee of five interested local farmers, advised by federal and provincial experts in various fields, formulated land consolidation schemes and submitted these to the public. The public generally found these schemes to be unacceptable.

A new administrative structure was formed (Fig. 6) under the guidance of the Socio-Agricultural Information (SAI) Officer. Under this structure, a Working Party Information Group,consisting of five members of the old Preparation Committee plus representatives from agricultural, women's, youth and farm workers' groups, acted as the main planning body.

An information and education programme was then created and initiated by the SAI officer. This programme gave objective information about the future of agriculture, the necessity of land consolidation, the rights and duties laid down in the Land Consolidation Act, and the opportunities for and necessity of public involvement in the planning process. This education programme was undertaken early in the project to give the people the information necessary to make enlightened decisions.

Members of the Working Group were retained by the SAI officer as discussion leaders. These discussion leaders then held over 120 living-room meetings with some 450 persons to explain the ideas behind land consolidation and to solicit opinions and ideas from the public concerning the project. The results of the living-room discussions were then summarized in a final report by the SAI officer. This report was the basis for the consolidation plan drawn up by the Working Group and its government advisors. Five public meetings were held to discuss the final report, with the advisors present to answer questions.

When the provincial authorities decided not to build the new road, the scheme had to be revised and the voting on the plan was delayed for six months. During this period, those opposed to consolidation organized to fight the scheme. In response, several members of the Working Party Information Group, along with the SAI officer, began a pro-scheme propaganda effort, even though the original idea was to give out only objective information.

Nevertheless, a majority of the area residents, controlling 71% of the farmland in an area where such schemes were traditionally voted down, voted for adoption of the consolidation plan. This result was due largely to the interest and efforts of the SAI officer to respond to local issues and problems.

BUREAU D'AMÉNAGEMENT DE L'EST DU QUÉBEC (BAEQ)

The project area consisted of the Gaspé, Lower St. Lawrence and Îles-de-la-Madeleine, a total of 15,500 square miles. The population in 1961 was 325,000, predominantly rural (67%), with labour participation in the primary industries of fishing and forestry. It is an area of low incomes, low education and the public is apathetic as far as extensive involvement is concerned.

The project attempted to use public participation as a means to social and economic development in the region, and to make public participation itself a development goal to minimize the former reliance on traditional institutions. The planners tried to use social animation techniques to instill ideas of social change and an awareness of the development process in the inhabitants of the region.

Conseil d'Orientation Économique du Bas St-Laurent (COEB), was founded in 1956 to improve the conditions of life on the Lower St. Lawrence. COEB convinced the Québec Government to take advantage of funds available through the Federal ARDA program for the improvement of undeveloped areas. Since the Québec Government wished to include the Gaspé and Magdalen Islands, the Regional Council for Economic Expansion of the Gaspé and the Magdalen Islands, Conseil Régional d'Expansion Économique de la Gaspésie et des Îles-de-la-Madeleine (CREEGIM), was formed in June 1963. In July, 1963, these two councils founded the Eastern Québec Development Bureau (Bureau d'Aménagement de l'Est du Québec–BAEQ)(Fig. 7).

Social animation was the name given to public involvement activities in this project. It was defined as the totality of techniques and methods used to ensure participation by the public.

The public participation activity of the BAEQ may be divided into two phases. In the first phase, October 1963 to September 1965, the population was taught how to participate. In the second phase, September 1965 to March 1966, the public participated by means of the consultation process.

During the first phase, the leaders of existing organizations and other competent persons were regrouped by the field workers to form new local committees. Previous structures were judged unsuitable to undertake the work of the committees, which was to inform and convince the population that before undertaking specific projects, research should be carried out. At the same time, a programme for training local people in leadership roles was begun.

A radio programme and a weekly newsletter were

launched in the spring of 1964 to give news about local committees and present themes for discussion during their meetings. Concurrent with this information effort, 220,000 questionnaires were sent out to assess the manpower situation. Thus, the local committees and the public were initiated into the research role.

The local committees were divided into subcommittees according to the sectors of activity which were most important in each locality. The local committee integrated the information produced by the subcommittees with the aspirations of the public. This served as the local contribution to the preparation of a regional plan.

Zonal committees were established in the fall of 1964 (Fig. 8), to synthesize the work of local committees and to integrate this with the reports produced by the BAEQ researchers. Zonal committees were composed of delegates from local committees, plus representatives of associations or enterprises and government officials of that area.

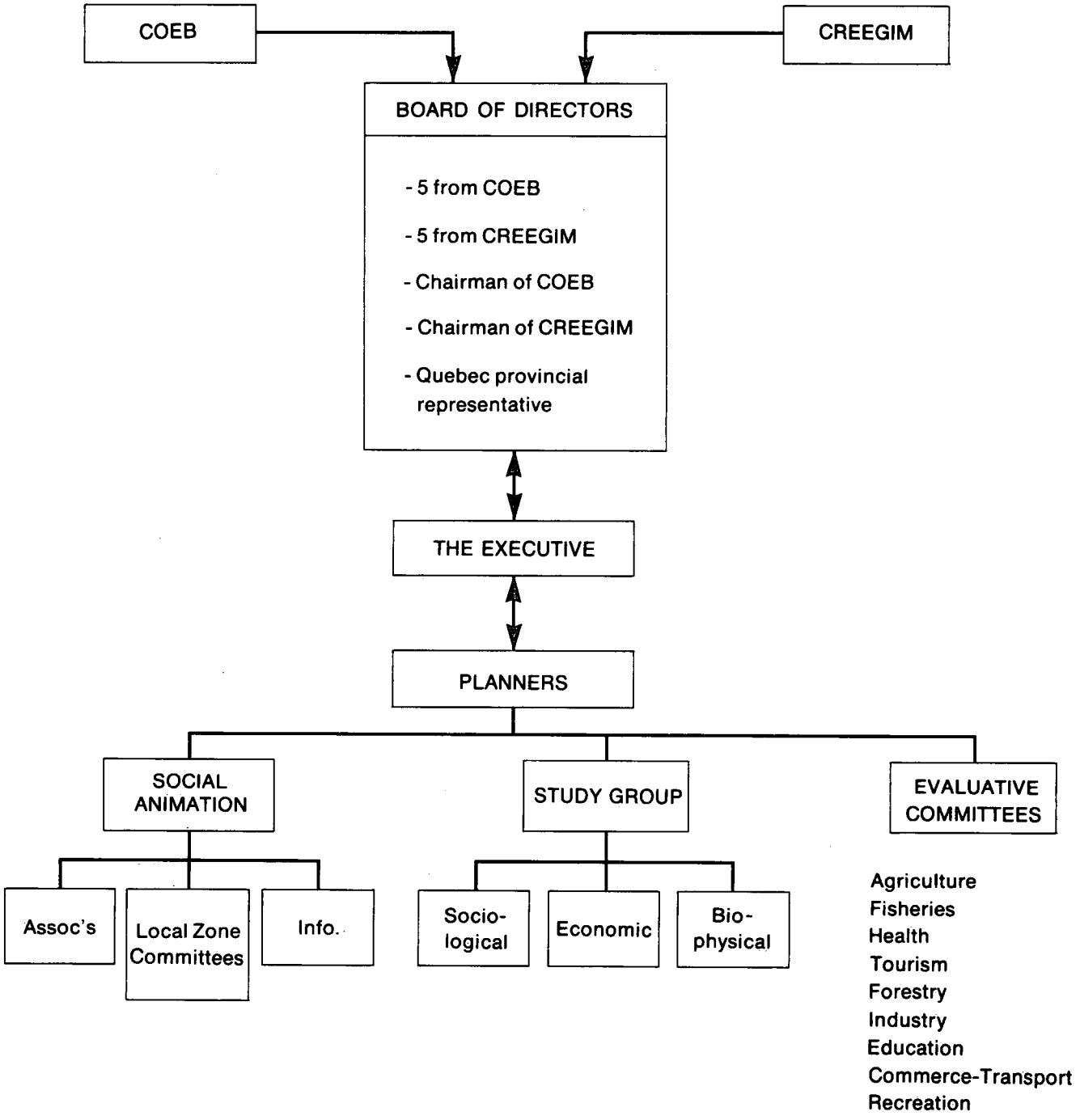


Figure 7. BAEQ, July 1963 – September 1964.

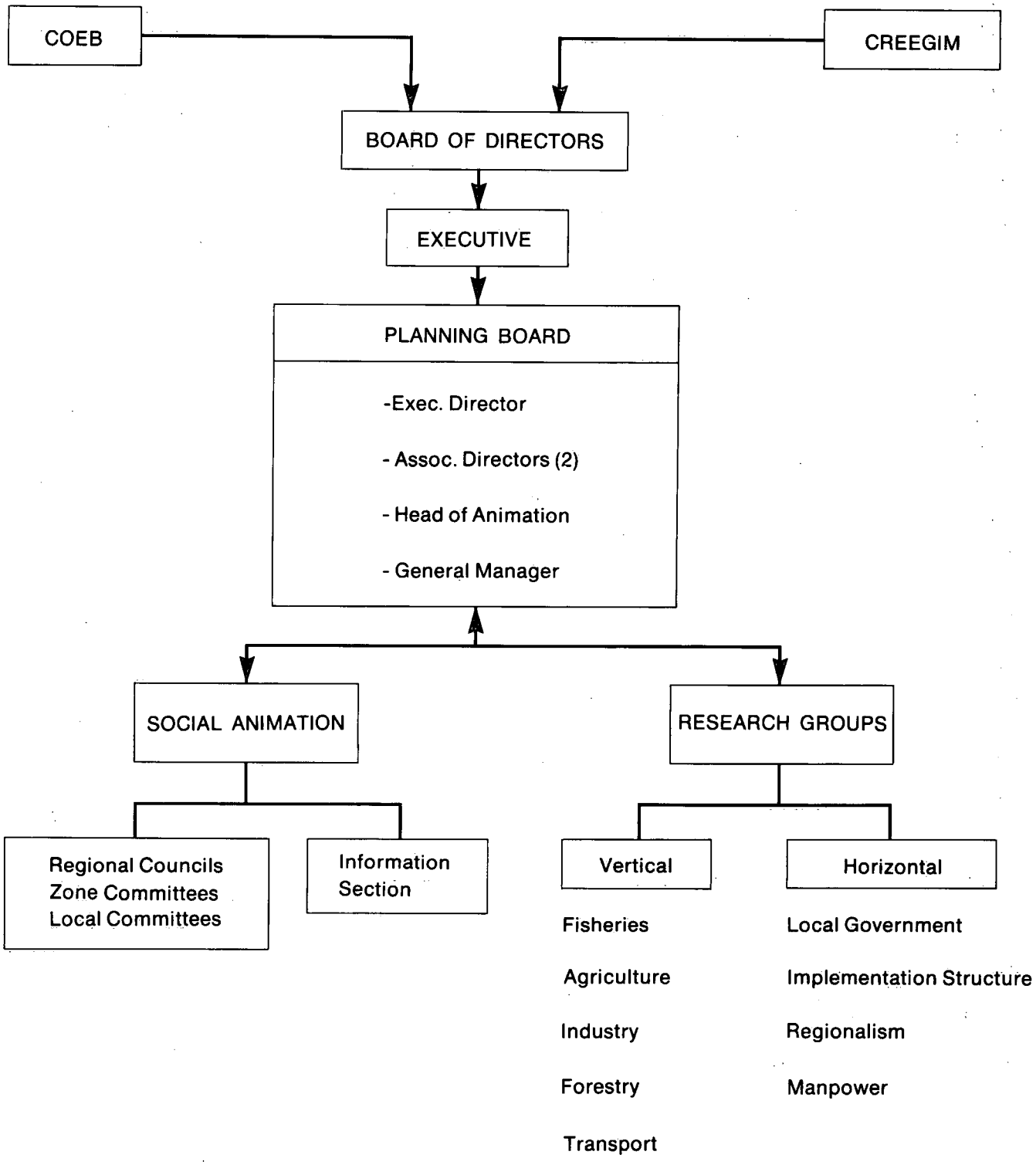


Figure 8. BAEQ, September 1964 – June 1966.

Following these developments, the second phase (consultation) began. While the structures for participation were being developed, the research division was conducting its own studies which were drawn together in a report "Sketch of the Plan." It was decided that this would be the focal point for the consultation process.

In the fall of 1965, five Regional Consultative Committees were formed. These included delegates from zonal committees, directors of affected enterprises or regional associations, regional government officers and specialists from the BAEQ. Their task was to analyze the zonal committee reports concerning the Sketch of the Plan. This was to provide input into the final edition of the plan.

As part of the public participation programme, multi-specialized *animators* worked with the people on three themes: attitudes toward change, understanding of planned development and special projects for development (e.g., sylviculture). These animators employed various techniques oriented toward both the needs of the people and the goals of BAEQ, including an information unit which used television, radio and newspapers. The animation and information services were designed to work in complementary ways and to proceed parallel to BAEQ research teams. As part of the programme, the animators founded "Télé-clubs;" T.V. broadcasts were beamed to local information subcommittees, which then discussed the subject matter and reported their opinions to the zonal committees. By 1965 there were 324 Télé-clubs.

About six per cent of the population participated in the BAEQ programme, a success in an area where only two per cent usually participated in public affairs. Another success was the establishment of an adult education programme. A leadership programme established by BAEQ trained almost 1000 persons; most of these, however, were already community leaders prior to the institution of the programme.

On the negative side, the BAEQ staff failed to involve the clergy actively in the early stages of the animation process. The clergy felt uninformed and left out and yet they were in leadership positions in the community. Consequently, many of the planning area residents did not respond to BAEQ programmes as they did not have the sanction of the Church. As well, in the first stages of the plan development, there was an information breakdown resulting in a failure by the people to distinguish clearly between BAEQ as a government-aided, but locally responsive development agency, and ARDA as a policy arm of the government. In this section of Québec, the government is viewed as a distributor of social assistance; because they identified BAEQ with the government, a large number of people seemed fairly uninterested in what the BAEQ teams wanted to do for them and with them.

In conclusion, except for the adult education and leadership training programmes, significant results achieved as a result of the extensive involvement process are not apparent. There are two main reasons for this: poor definition of the planner's role by the BAEQ and goals that were too global in scope.

FOGO ISLAND IMPROVEMENT COMMITTEE, NEWFOUNDLAND

Fogo Island (110 square miles in area) lies off the northeast coast of Newfoundland. Its 5,000 inhabitants live in little villages along the coast and are engaged primarily in fishing. Despair over the economic situation and the state of public services on the island led a group of residents to form the Fogo Island Improvement Committee to secure such benefits for the population as improved roads and the establishment of a fish cooperative.

The major sources of initiative for the Committee were the new parish priest and the arrival of an extension representative from Memorial University. Other clergy on Fogo became involved in promoting a self-help development project.

The direct participation of the populace as a whole was not planned by the Committee. The Committee itself was a grass roots effort of interested citizens and they tended to assume the role of representatives. To interest the people and keep them informed, they published newsletters, gave press and radio releases on various issues and arranged fishermen's conferences.

The Improvement Committee acted to define problems, identify possible solutions and implement various projects. The committee had neither widespread public support on the island nor recognition by the provincial government as a representative body.

The Improvement Committee did succeed in certain projects. An improved slipway and ship-to-shore radio were provided for Fogo Island. The services of a doctor were obtained. A university extension programme was introduced. Roads on the island were improved. A federal rebate on motor taxes was obtained.

Nevertheless, the committee did not have sufficient power to pressure the provincial government into preventing the sale of the fish processing plant at Seldom to a foreign company; this plant was to be the basis for a new cooperative which the Committee had decided was important to fulfill the economic needs of the community.

The exclusive character of the committee alienated large numbers of people. Consequently the work of the extension representative was not seen as legitimate by the people. It is interesting to note that 35% of the heads of households interviewed during one survey had never heard of the Fogo Island Improvement Committee.

CONSEIL RÉGIONAL D'AMÉNAGEMENT DU NORD-OUEST (CRANO), NEW BRUNSWICK

The project encompasses Madawaska County, the town

of Grand Falls and Drummond Parish, some 1,800 square miles, and a population of 45,000 people of whom 55% are classified as rural, and 45% urban. The people have a low level of education and their primary sources of income are agriculture, forest products and tourism.

The main objective of the project was the improvement of social and economic standards in the area with concentration in seven sectors: education, forestry, agriculture, manpower, industry, tourism and handicrafts. CRANO is a private, non-profit organization financed by ARDA and contributions from municipalities and private organizations.

Eighteen local committees were set up in the region, each representing one parish. Each local committee appoints two delegates to the regional council. Council membership also includes two members from Edmundston City Council, one from Grand Falls Town Council, one from St. Léonard Town Council and one from the Collège St. Louis. The regional council elects 21 directors from amongst themselves, who in turn elect the executive.

The local parish sectorial subcommittees (agriculture, forestry, tourism, education, labour, handicrafts, industry) were given study guides to complete which were forwarded

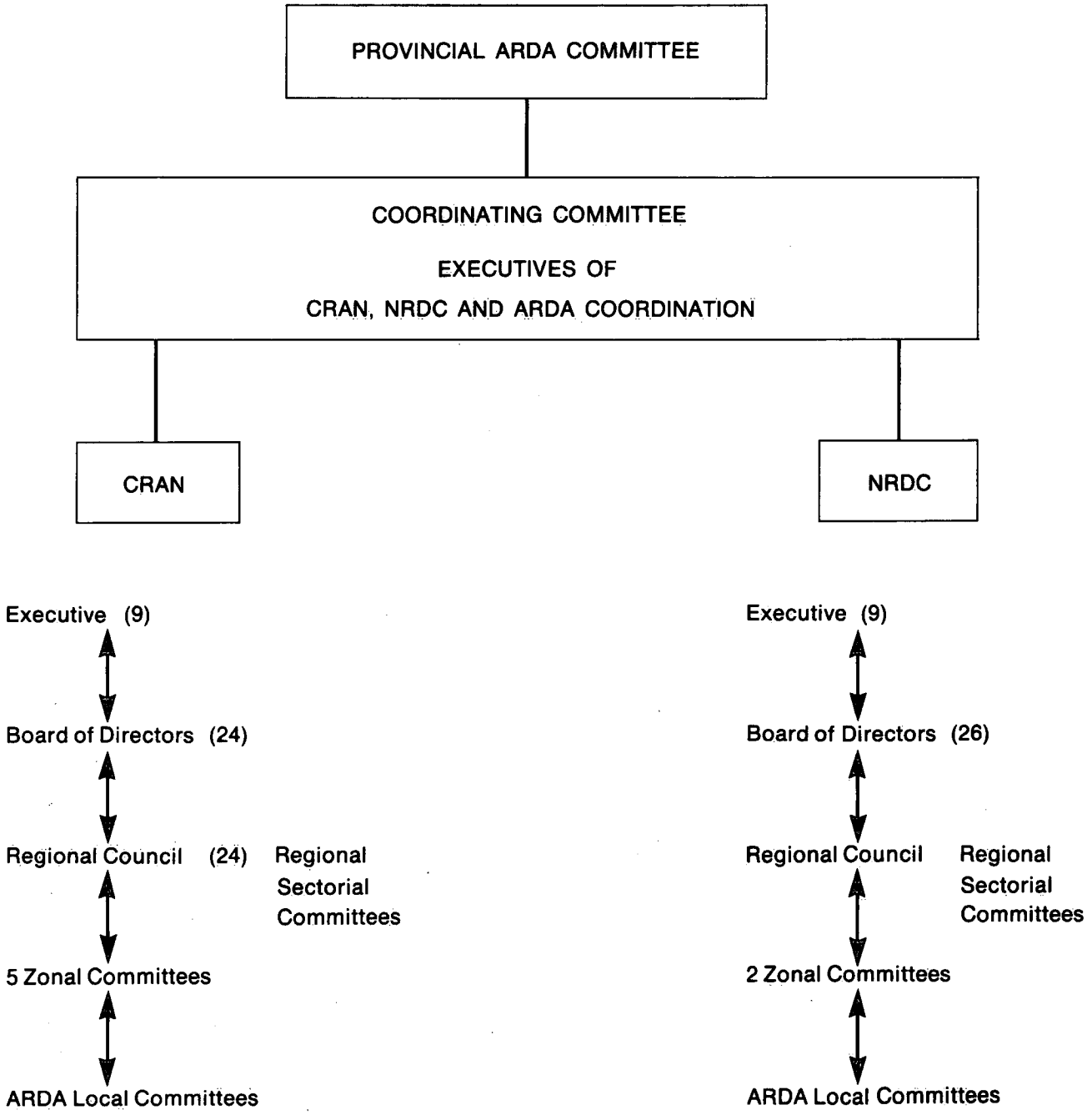


Figure 9. CRAN and NRDC.

to the CRANO regional office and compiled into a comprehensive inventory of the area's resources.

Proposals were made to the directors with regard to projects, identifying needs, analyzing problems and formulating solutions and programme mechanisms.

Public inputs were solicited at meetings called by the social animators whose presence in the community as participant observers was useful in identifying the local influentials, opinion formulators and information disseminators.

This grass roots effort succeeded in gaining provincial government recognition and thus the granting of funds and the services of a regional development officer. An inventory of the area's human and natural resources was compiled and this helped instill in the people an awareness of the region's potential. Adult education programmes were also started.

Unfortunately, budget and political problems have caused CRANO to drop most of its programmes. The only remaining project is the relocation of several families, and CRANO was granted funds for this only when it agreed to work with the provincial Department of Agriculture and Rural Development.

Although public reaction to CRANO was very favourable at first, the people have become discouraged with the project because of the lack of concrete results. As with the BAEQ, CRANO was too broad in scope with no short-range projects, the results of which would have kept the people interested and participating.

CONSEIL RÉGIONAL D'AMÉNAGEMENT DU NORD DU NOUVEAU-BRUNSWICK (CRAN) AND NORTHERN REGIONAL DEVELOPMENT COUNCIL (NRDC)

The project area consists of the northeast part of New Brunswick, more specifically, Restigouche, Gloucester and part of Northumberland County. The primary economic activity is fishing; for the majority it is a subsistence level economy. A social and economic development plan for the area was drawn up by provincial ARDA officials. The role to be played by local committees in stimulating development and implementing the programme was given great emphasis in the plan for development. CRAN and NRDC were formed in 1964 and 1965, respectively, to promote the ARDA programme in the area (Fig. 9). CRAN dealt with the French-speaking population and NRDC dealt with the English-speaking population.

Local committees were used to inform the public, to generate new ideas for projects and implementation methods, to act as a liaison between the implementers and the populace, to assist in the implementation of projects, to create publicity, to recruit support staff and personnel administration and to assist in the evaluation process, in short, to be the *sounding board of the people.*

The local committees collected social and economic data and tried to interest the public in the project. The people participated in seminars to identify problems and local needs, to identify procedures for problem-solving and to develop local leadership. Recommendations were passed to the zonal committees who submitted proposals to the Coordinating Committee. The Board of Directors included three interested persons, nine representatives of local organizations and twelve representatives from local ARDA committees.

Except for a number of reports on local problems and issues, not much can be claimed for this massive local effort. Even though 2,000 people representing two language groups and over 30 communities worked together, there seemed to be a lack of genuine enthusiasm toward the end of the project (1970).

Although the structure for public involvement existed, the public did not seem enthusiastic about participating. There was some question as to whether this was simply a lack of enthusiasm, or whether those purporting to represent the people were representing other interests. Budget difficulties and internal philosophical and power struggles hampered CRAN-NRDC.

CEDAR LAKE

The project area is the Chemuhowin (Cree) Indian Reservation on Cedar Lake, 55 miles southwest of The Pas, Manitoba; approximately 388 people lived on its 6,000 acres. The main source of income was commercial fishing; many also engaged in trapping, hunting and forestry.

The Government of Manitoba planned a major power project for the mouth of the Saskatchewan River at Lake Winnipeg, near Grand Rapids. One of the implications of the project was that it would flood the reservation, thus necessitating the relocation of the Indians living there. The responsibility for relocating the people was given to a committee of senior government administrators (the Forebay Committee) in 1961.

The Committee communicated the plans for the relocation to the community through a letter of intent in 1962. There was a preliminary study of the Chemuhowin conducted by the Provincial Community Development Services before the people were formally moved in 1964. This, however, dealt mostly with economic rather than social issues. There was apparently no thought given to public participation until the question of the selection of the new site arose in 1963.

The relocation site was selected by a local committee. The Forebay Committee assumed that the local representatives reflected the attitudes and preferences of the community. This was not so, and as a result there were misunderstandings and bitterness. A meeting was held to

explain the issue to the people, but the language problem added to the misunderstandings.

During the winter, the local committee and representatives of Manitoba Hydro and the Forebay Committee visited 11 potential sites. Easterville was chosen; it had a good harbour; it looked like the old site; and there was the possibility of road connections to large centres.

Choosing the site in winter made it very difficult to assess its potential. Many residents felt that Manitoba Hydro pressured them into accepting Easterville.

The new site did not have good trapping and grazing grounds and the newly built dam flooded their former grounds. A source of prestige and personal gratification was thus denied to the residents. Loss of the source of food made the people dependent upon the new cooperative which could not extend credit and thus caused further bitterness.

The loss of former food and prestige sources has severely affected Easterville. The social integration of Indians and Métis is no longer apparent, since each perceives the other as the scapegoat. As well, liquor consumption and alcoholism have increased significantly – a sign of community disintegration and personal stress.

MACTAQUAC REGIONAL DEVELOPMENT PROGRAMME

The project area is located in the Saint John Valley above Fredericton, New Brunswick. It consists of 11 parishes and the population is 100,200 (1961). In general, the education level is low; over 70% of the people over 14 years of age report having had no formal training. Sixty-two per cent of the population hold jobs in Fredericton or nearby Woodstock or Buller's Corners; the rest are engaged mainly in agriculture and forestry.

The need for an agency with the authority to further regional development led to the enactment of the Community Improvement Corporation Act, April 3, 1965. In June 1965, the provincial government designated the Mactaquac Regional Development Area under the CIC as an area in which the Corporation would assume responsibility for the coordination, implementation and management of a regional development plan.

Public participation was introduced only in the late stages of planning and the early stages of implementation. The citizens assisted planners by helping in the gathering of social and economic data. An information and education programme was started after the plan was established; contact with local citizens' committees was kept up by extension workers and relocation counsellors. Basically, however, local people contributed nothing to the development of the plan. There were no representatives of the public within the administrative structure.

As a result of the plan, the Mactaquac dam was built, flooding and creation of the headpond took place and the model town, Nackawic, was started. Strong opposition to relocation was not apparent, though this should not be taken to mean there was a favourable consensus among the people.

There were few positive feelings regarding the project; frequently there was a distinction made between the potential value of the project for the region and its personal impact on the individuals.

There was a distrust of the project and its sponsors because the population had ill-defined ideas about the project and so the bewilderment and confusion were translated into quiet hostility. Cultural norms apparently kept the people from protesting more loudly; on the surface there appeared to be traditional acceptance.

In this area, there was frequently an inability on the part of the population to regard government as a positive, socially constructive force; *they* and *we* concepts were held – the fact that the two could have anything in common seemed inconceivable. The public relied primarily on the kin group and, secondly, on the village; thus there was no enthusiasm for the idea of participation in large-scale enterprises.

The Mactaquac planners failed to generate an understanding of their aims and goals for the project by means of an information-education programme before the project began.

One serious question arises: was it necessary to build the dam at that particular place, thus flooding out old family farms and inundating valuable agricultural land which was not replaceable? Research has indicated that there was little study done on the possibilities of other alternatives which may not have been so costly in social terms.

BRANDYWINE BASIN, PENNSYLVANIA

The project area is the upper east branch of Brandywine Creek and includes portions of eight townships; it has a population of 4,500 and covers an area of 37 square miles. The area is basically rural, but there are two industries (paper processing, and production of iron fence posts). Industrial, human and animal waste pollution is evident.

The valley is within commuting distance of Philadelphia. To accommodate imminent suburban growth without sacrificing aesthetics and water quality, the Chester County Water Resources Authority (CCWRA) engaged the Institute for Environmental Studies of the University of Pennsylvania to carry out detailed studies and develop a comprehensive plan for the basin.

While the consultants were making further detailed studies of the Brandywine, the technical report and

preliminary plan were taken to the people. A detailed attitude study was carried out which indicated that the people were concerned with preserving the beauty of the area and the quality of the water. The study also showed that the residents valued the independence of the landholder and distrusted government intervention.

Although two residents from each township were appointed to act as a liaison between the people and the CCWRA, the plan at first met with great apathy, resulting in meager attendance at public meetings. Later, a consensus of antipathy developed and the Chester County Freeholders were established to fight the plan. As a result, the comprehensive plan was rejected at a series of public meetings in 1967 and 1968.

In 1968, the people formed a 14-member planning commission to develop viable alternatives and modifications to the original plan; instead of conservation easements, it recommended local ordinances. The CCWRA accepted these modifications and the revised plan is now being implemented.

The hostilities arising from the consultants' comprehensive plan could have been avoided. First of all, the planners did not do enough investigation into the background of past developments in the basin. The attitude study indicated that the residents disliked government intervention, yet there was little effort to find out why. Later (too late), it was discovered that the residents had had bad experiences with pipeline, power-line, and flood-control projects in which eminent domaine (a writ to force the sale of land) was invoked with little attention to local interests or feeling. The Brandywine Plan proposed to use this writ if farmers did not sell conservation easements voluntarily. Considering the value placed on independence by the local landholders, it is little wonder that people reacted with such hostility.

There was little attempt to inform the people of what was taking place in the planning process and the development of the plan. After the second series of unsuccessful meetings, a booklet was published explaining the plan, but this was the result of hindsight and was in any case too late. Rumour had taken hold; people felt they were being pushed around. They resented "intellectuals" and outsiders telling them what to do with their land; they felt they were being "railroaded, patronized, and lectured to." CCWRA was suspected of engineering a land grab.

The people of Brandywine were presented with the final plan. They were not involved in the setting of goals and means in the planning process, or in any sort of evaluative position where their feedback could be integrated into the plan. They were presented with a *fait accompli* and no possible alternatives. Although the Brandywine Plan may be technically feasible, as far as the public participation aspect is concerned, it is a striking example of good intentions but inadequate planning and preparation.

Brief Analysis of Case Studies

The successes and failures of the public participation programmes reviewed in the case studies can provide valuable information for the planning of future programmes. It was anticipated that the following factors may have had a bearing on the degree of success attained by each of the case studies: source of initiative for the project, administrative structure, organizational position of public participation, timing, mechanisms for involvement and public inputs.

To facilitate the comparison between the studies with regard to these factors, they were first divided into two groups—successful and unsuccessful—the sole criteria being: did the planners meet their objectives for public involvement? The successful projects are: Delaware Estuary Study, Muskingham Watershed Conservancy District, Susquehanna River Basin, Friesland Land Consolidation Plan and Tennessee Valley Authority.

SOURCE OF INITIATIVE

In the five successful projects, the initiative was taken by state and local governments. Among the unsuccessful projects, sources of initiative range from strictly local initiative (Fogo Island) to federal-provincial agreements (BAEQ). Thus, little significant difference can be seen between the successful and unsuccessful projects regarding source of initiative. This is surprising since according to community development theory, one might expect the successful projects to be more dependent on local or regional initiative.

THE ADMINISTRATIVE STRUCTURE

The administrative structure is broad in all cases with the exception of three: TVA, Mactaquac and Cedar Lake. The term *broad* is used in a fairly loose sense. Essentially it refers to three things:

(a) a structure in which there are relatively few levels of hierarchy between the public and the planners/decision-makers,

(b) a structure which draws on the various levels of government concerned and involves representatives of the public, and

(c) a loose organizational structure, minimizing control and supervision, maximizing delegation and emphasizing a two-way flow of communication and feedback.

In the Cedar Lake project the Indian people were represented by their chief on the Forebay Committee; tight administrative control, however, was maintained by Manitoba Hydro. Insofar as the Mactaquac project is concerned, there is little evidence that any effort was made to involve public representatives in the planning process. The TVA had a complex administrative structure in which actual decision-making was far removed from public input. The public was more involved in the implementation stages.

As most of the successful and unsuccessful programmes were characterized by a fairly broad administrative structure, it may be concluded that this factor is not one of the key factors to the success of a public participation programme.

THE ORGANIZATIONAL POSITION OF PUBLIC PARTICIPATION

Most of the successful programmes, with the exception of TVA, as well as several of the unsuccessful programmes (BAEQ, Fogo Island, CRANO, CRAN-NRDC), had meaningful public input at a fairly high level in the planning organization hierarchy. Thus, it seems that this factor is not particularly significant in determining the success or failure of public participation programmes.

TIMING OF PUBLIC PARTICIPATION EFFORTS

The successful programmes, and BAEQ, CRANO and CRAN-NRDC, all attempted to involve the public early in the programme and to maintain that involvement throughout. Public involvement is not meaningful if inputs are requested only when the opportunities for effecting real changes and modifications have passed; this is one of the major weaknesses of the unsuccessful programmes.

PUBLIC PARTICIPATION MECHANISMS AND INPUTS

The types of input and the mechanisms employed are interdependent. For example, if the public is involved in

gathering socio-economic data and preparing background reports, as in CRANO, CRAN-NRDC, BAEQ, they are primarily involved in an informational-educational role. Generally speaking this is a one-way flow of information, though it may be modified to become two-way if feedback is a built-in component. Most of the mechanisms employed by the unsuccessful projects were one-way communication efforts with the exception of the BAEQ Project. The working groups and study committees were data-gatherers for the planners and decision-makers, but *dialogue* between the two was not characteristic. Moreover, public meetings and hearings held by the Fogo Island Improvement Committee, CRANO and the Brandywine were also a one-way communication mechanism from the public to the planners; feedback was very limited.

On the other hand, the successful projects emphasized frequent interaction and dialogue between members of the public and planners via representation on boards, advisory committees, forums and meetings. Information dissemination was continuous and designed to complement the previously mentioned mechanisms. Thus in the successful projects the public was given the opportunity for real and substantial inputs in the form of suggesting modifications and alternatives to proposed plans at appropriate stages in the planning process.

This leads to the reinteraction of another extremely important point. The planners must investigate and accept the assumptions, both implicit and explicit, evident in a participation programme. They must carefully define their own roles and expectations as far as public involvement is concerned and yet maintain flexibility to respond to the desires and suggestions of the public. BAEQ is a prime example of a good programme that faltered owing to these shortcomings; the internal management struggle and the ambiguous image presented to the public did little to enhance the faith of the public in the socio-economic betterment plan. In addition, the public must be given a specific focus for channelling their energies. For example, within a comprehensive water management plan, the planners may outline and propose water quality goals and objectives for each of the sub-regions of the basin as the first concrete step in stimulating discussion and critical appraisal by the public and its representatives.

Also, conflict between planners and public must be accepted as a distinct possibility; it is not something to be ignored or suppressed by a veneer of public relations efforts. Rather, meaningful interaction and dialogue between the two sides throughout the planning process can resolve this conflict, achieve compromise and create a broader consensus as to water management plans.

In summary, this review has isolated two factors of key importance for an effective public involvement programme: early and sustained involvement and two-way communication between the planners and the public.

CHAPTER 3

Public Participation Techniques

In recent years a great deal has been said and written concerning the *why* of public participation. Most planners and decision-makers are convinced to the point where statements concerning the integration of public participation in the planning process has become akin to motherhood and apple pie. A great deal of frustration, however, is generated by the question of *how*. Here the various possibilities available are explored. First, a number of techniques and mechanisms will be discussed. Next, recommendations will be made as to their relevance in various phases in the planning process.

IDENTIFICATION OF LOCAL LEADERSHIP

If the American programme, "War on Poverty," had paid more attention to identifying and encouraging indigenous leadership, trusted and respected at the grass roots level, many of its subsequent problems in stimulating public involvement could have been avoided. Hopefully, present and future water resource managers will take note of this before proceeding with their plans for any given river basin.

There are basically two ways of identifying local leadership. These are reputational and participational measures. In the former measure, a panel of experts on the local area are asked to list names of knowledgeable local residents. The latter are then interviewed and asked whom they would select for leadership on particular aspects, for example, water-related problems. Also, they are to select those whom they would want as co-leaders. This could be done by means of a survey instead of using a panel at the start. Another method is the "snowball technique." Community members are asked who local leaders are and the *repeats* are designated as leaders.

The participational measure includes a review of past action programmes and issues from which the key leaders are identified. Also, newspapers are reviewed to produce a summary of major programmes and principles involved for the past five years. Particular attention is paid to water-related projects. The key people are then interviewed and asked about others who may have been involved and not mentioned. Moreover, local organizations are asked to list their activities and key personnel involved for the past five years. A combination of the two main measures, reputational and participational, reveals a fairly clear picture of local leaders and possible influentials.

In urban renewal projects in Toronto, two types of local leaders were identified. The first is a leader who is a long-term resident of his area, who is concerned about its associated problems but who feels largely powerless to effect change. The second type of leader is important in stimulating public awareness and giving people confidence that something can be accomplished; the first leader is far more successful in promoting cooperative action. These are important facts to remember when working at the community level in the management of water resources.

The main criticism for relying on the established leadership is that the method may not increase the participation of the general public. Local influentials may have built-in establishment biases that may in the long run prove detrimental to the programme; for example, they may limit involvement to the traditionally active sector of the community. This method tends to ignore the need for new leadership in some cases and may neglect to take into account new activist groups. These factors should receive careful consideration before placing undue reliance upon the local leadership.

The development of a local contact network is extremely useful in stimulating public involvement in the planning process. These networks are made up of people who are influential in affecting local opinions on given issues, and who can function as information exchange nodes both for the planners and the public. Researchers found that in the Susquehanna Basin the public tended to use the viewpoints and statements of local water *experts* and community opinion leaders as reference points for judgements regarding the desirability of various proposed water resource projects (Borton, Warner and Wenrich, 1970). To be effective in their role, these contacts must be informed on a continual basis by the planners about the progress of the project and future plans.

INFORMATION

Information about opportunities to participate and about the types of impact such involvement is expected to have in terms of influencing study progress, recommendations and implementation, is very important in establishing

a higher level of awareness on the part of the public. This is the first and essential step in a well-formulated information programme. Other prime considerations are that the dissemination of information be continuous and that appropriate and adequate feedback mechanisms be instituted.

Emphasis and explanation should be given to the fact that public response is not only desired but also needed. It is suggested that when possible, television stations should be encouraged to cover various aspects of the plans and/or produce short documentaries about basin water problems and possible alternative solutions. Radio and press coverage should also be employed. It may be a good idea to prepare special information kits for the media and update them as necessary. Also, it is important to remember that if you want media coverage, it is necessary to make the media want you. The organization of conferences, forums, seminars, speak-ins, preparation of displays for local events, etc., all tend to attract the attention of local media. Of course these techniques should be carried out as a cooperative effort with local organizations and associations.

Direct mail pieces, brochures and newsletters should also be prepared. Perhaps several types of brochures could be designed, e.g., for general public, local governments, industries, schools. They should be prominently displayed in various locations in the study area, particularly those spots where people have to spend time waiting. Also, it may be a good idea to establish *a clearing house* address for the various information materials (printed and audiovisual), so that local organizations and individuals may obtain these for their own personal use or as supplementary material for discussions and meetings.

It should be noted that individuals obtain information in various ways. It has been found (Lingwood, 1971) that the printed word is the most important means of transmitting information; personal contact and conversations rank next. Newspapers are generally read by older people and non-students. Exhibits and teaching appeal particularly to younger age-groups. Meetings attract people who have hobbies and outside interest, and conversation is the usual mode employed by females for transmitting information. Hence, different information techniques may be employed to reach different segments of the public. Further research is required in this particular area.

Most important of all, every possible attempt should be made to overcome obstacles to information dissemination. An uninformed public cannot participate! In a survey carried out by the School of Natural Resources, University of Michigan, the respondents stressed the need for greater public access to study information. Many identified this as the major obstacle in improving public participation (Warner, 1971).

Further points concerning information programmes are mentioned in Chapter 4 tying in public participation with the planning process itself.

SAMPLE SURVEYS

The public representation achieved with a well-designed sample survey is much higher than with other methods; the results are more easily interpreted; problems associated with meeting sites and times avoided; the approach also has the advantage of being a relatively inexpensive and rapid means of collecting the necessary information. There are, however, a number of disadvantages to consider. The public may not understand the issues on which it is being questioned. The public is often over-surveyed and this makes it difficult to obtain cooperation and attentiveness during the interview. A poorly executed sample design and questionnaire bias the results. Finally, this method does not permit two-way communication between the planners and the public.

WORKSHOPS

The workshop technique has proved successful in developing a sense of trust and understanding, since its structure stimulates two-way communication; it is informal and the groups are small. The effectiveness of the workshop depends on a number of factors.

Experience has shown that workshops function best if they are sponsored by a local organization and the content and format are oriented toward the interests and concerns of the public. Workshops could be set up by civic and environmental groups who have a feeling for current issues and who would be capable of distributing the information and chairing the meeting. As a rule, a 2½-hour meeting on a weekday evening is best; the meeting place should have adequate room for small discussion groups (Bishop, 1970). The preparations beforehand should include letters sent by the sponsoring organization to the leaders of other local organizations and interest groups informing them of the workshop. It is useful to inform the media as well and provide them with adequate documentation (information kit). The sponsors should be thoroughly briefed on the aims and objectives of the workshop, thus enabling them to make the general presentation at the outset. The representatives of the planning office would be introduced during the course of the presentation and later join the discussion groups. A model workshop would proceed in the following manner (Bishop, 1970):

(a) Registration,
(b) Introductory Session (approx. 30 min.)
  - objectives and status of the planning effort
  - purpose of the workshop and its role in the planning process
  - organization of the workshop and what is expected of those in attendance
  - introduction of the planning staff present
  - task-oriented presentation to instruct local

participants on what and how they can contribute at this planning stage
- at this point a questionnaire could be distributed to focus attention on what could be gained or accomplished during the workshop. The results of the questionnaire could be compared with those of a follow-up questionnaire in order to evaluate the effectiveness of the meeting,

(c) Group Discussion (1 to 1½ hrs.)
- groups should be of manageable size, not larger than seven or eight
- if possible each group should be joined by a representative from the sponsoring organization and one from the planning office
- the sponsor should assume formal leadership in laying out problem areas, posing questions, in summarizing and following up on the concerns and needs expressed by the group
- planning personnel are to provide only technical support and to monitor the discussion
- someone should be selected to record pertinent questions and discussion from the individual groups, and

(d) Summary Session (½ to 1 hr.)
- all the recorded materials should be posted for all to see; points which received the most attention in the workshops should be highlighted
- the planning representatives should outline how those present can continue to participate
- forms should be distributed so that those present may request further information and written summaries of the workshop; also, an evaluation questionnaire should be distributed
- summaries of the workshop should be sent to the press.

The workshop technique is very usefull but since its success depends on limited size, the organizers must attempt to attract participants that represent a good cross section of community interests so that all points of view are heard. The role of the planning representatives may be modified to suit particular situations. They may assume greater initiative in the discussions than outlined above, if the sponsor is reluctant to do so or if the technique is used to obtain feedback on planning ideas. The workshop format is particularly appropriate in the selection of water management goals and evaluation of specific study proposals. It is a good idea to follow up the workshop with a public forum or meeting to allow other interested community members to express their comments.

ADVISORY COMMITTEES

Usually these committees are made up of representatives of major interests in the area and they serve as links between the planners and the public.

The committee meets regularly with the planners and acts as an area sounding board for the alternatives, proposals and ideas presented by the planners. For the committee to function effectively, the meetings and activities of the body should be openly publicized. Moreover, to be an effective mechanism for maintaining two-way communication, the committee should remain active in its role of intermediary and have the necessary information to do so.

PUBLIC HEARINGS

Public hearings have acquired a poor image in the past few years as a technique for public involvement. As a result, the U.S. Corps of Engineers has renamed their public hearings, *public meetings*. Briefly let us consider the advantages and disadvantages of this technique. By virtue of long tradition, public hearings do have a fairly high degree of legitimacy, but the drawbacks are numerous. The formality and protocol involved tend to inhibit many participants, thus giving the hearing board a distinct psychological advantage. If there are a large number of presentations, lack of time may even prevent some from being given. Usually the plan or proposal is being presented and explained for the first time and the public is ill-informed; hence, the communication becomes a one-way process.

It is not the public hearing approach that is wrong, rather it is the way it has been used. A public hearing would be more appropriate after a good information programme has been underway for some time, supplemented by a series of workshops and public meetings which enable the participants to discuss the issues and raise questions. At this stage a hearing would be more meaningful to both the planners and the public since the latter would possess adequate information for presenting well-formulated briefs. Keeping those factors in mind, as well as the legitimizing effect attached to public hearings, it is possible that hearings may be a useful technique to employ in the final stage after the proposed plan has been presented.

PUBLIC MEETINGS

These meetings differ from public hearings in the sense that they are characterized by an *informal* two-way discussion. Public meetings have a low-key approach which encourages the participants to express their attitudes and opinions to a panel of planning representatives. It is useful to use local sponsorship for these meetings as in the case of workshops. This technique is suitable for stages in the participation programme when the planners wish to reach a

broad range of people on a more general level, such as the identification of goals.

PUBLIC INQUIRY

This approach has not been used in public participation programmes thus far but this does not mean that it should not be considered. An inquiry requires one or more independent hearing officer(s) to gather what he/they consider to be all the pertinent information on the subject. This involves a longer time period and multiple hearings. As a result more people can participate and the bias of the planners and decision-makers is eliminated from the proceedings, since they have the same participant status as the other groups presenting briefs. This technique, however, does not guarantee more adequate public representation than is obtained by public meetings, and the procedure itself is not altogether practical as the planning office loses the right to control the flow of the study.

SPECIAL TASK FORCES

This approach may be used when encountering planning problems of a highly technical nature; it may also be used in studying strictly local problems (e.g., Lorneville controversy, Saint John Basin). As an aspect of the public participation programme, the task force identifies and advises the planners of local preferences for solutions to particular planning problems. To be a valuable tool it is essential to have task force members representing different sides of the issue.

GAMING SIMULATION

This technique has been used fairly successfully in the past as a part of management courses and sensitivity training groups. It involves a game situation within which the participants assume certain roles that are central to the issue around which the gaming situation is built. In a game-simulation exercise concerning water planning, the participants may play at being industrialists, farmers, elected officials or leaders of environmental groups. This is an excellent means of illustrating the complexities of decision-making in local water resource problems, and it also enables the participants to appreciate other points of view – the first step to conflict resolution. This technique could serve as a variant on the discussion groups in a workshop situation.

FORUMS

Forums are essentially the same as public meetings. Since they are frequently mentioned as a *technique*, they are given here as a separate category.

They usually consist of an opening presentation given by a planning representative. A panel representing both planning and public interests responds to questions and to comments from those present. As with meetings, forums are useful in reaching a broader range of interests. They should be tied in with an excellent information programme and are especially effective as follow-ups to workshops and other techniques that stimulate participants to broaden their communication network.

Table 1. Descriptive Dimensions of Public Involvement Mechanisms

Type of public involvement mechanism	Descriptive dimensions				
	Focus		Degree of two-way communication	Level of public activity required	Agency staff time requirements
	Scope	Specificity			
Informal local contacts	L	H	H	M	M
Mass media (including use of newspapers, radio and TV)	H	L	L	L	L
Publications	H	M	L	L	M
Surveys, questionnaires	M	H	L	M	M
Workshops	L	H	H	H	H
Advisory committees	L	H	H	H	H
Public hearings	M	L	L	H	M
Public meetings	M	L	M	M	M
Public inquiry	H	L	L	H	H
Special task forces	L	H	H	H	H
Gaming simulation	L	H	H	H	H

Legend: L – low
H – high
M – medium

SUMMARY

The effectiveness of the techniques discussed depends upon the particular situation involved, for example, the focus and scope of the planning effort, the available resources, the historical background, the seriousness and importance of water management problems in the area, the types of interest groups and their level of commitment to the planning efforts. All these aspects should be carefully investigated before formulating a public involvement programme.

Moreover, the techniques have certain characteristic dimensions that should be explored to select the most appropriate type for a given purpose. To some extent, these dimensions have been mentioned. In summary they are:

(a) the scope and specificity of focus, i.e., how many people and what types of people can be contacted,

(b) one-way or two-way communication of information,

(c) the degree to which the mechanism assumes agency initiative for action, public participation initiative for action, or a mixture of both, and

(d) the agency resources (in terms of staff and time commitment) which are required for the implementation of each. Table 1 capsulizes the characteristic dimensions of some participation techniques (Warner, 1971).

CHAPTER 4

A Model Public Participation Programme

INTRODUCTION

As the situations encountered in river basins where comprehensive water management is proposed or already in progress are often unique to the particular basin, a general rather than specific guide for an effective and meaningful participation programme is presented. Hopefully, the model will also stimulate new organizational measures regarding such programmes. The weaknesses of a number of involvement programmes were pointed out in Chapter 2. The following model attempts to overcome those shortcomings and thus emphasizes the following:

(a) greater public access to study information,
(b) the provision of more opportunities for discussion of public viewpoint and preferences during plan formulation, and
(c) an orientation to interaction/dialogue as the functional emphasis for public involvement as opposed to an educational/information emphasis.

The six action phases constituting the model are:

(a) the identification of goals,
(b) detailed studies and data collection,
(c) identification of alternatives, evaluation of alternatives,
(d) preliminary plan recommendations, and
(e) final plan presentation.

These different phases are correlated with the methods and techniques of the participation process (Flow Chart inside the back cover).

IDENTIFICATION OF GOALS

In this phase the planners and public participation staff compile data on the social structure of the planning area, e.g., an inventory of local government machinery and elected officials is made. The local interest groups which are likely to be concerned with water management issues and policies should also be identified. This would include, for example, the functional areas of agriculture, industry, municipal water supply, waste treatment, recreation associations, environmental groups, etc. The next step is to investigate the extent to which these groups are organized and what their commitments are concerning water resource problems.

Then local leaders should be identified and a preliminary contact network established. Every effort should be made to establish a trust relationship with the public. The planners should take every possible opportunity to explain what the water management project is about, their goals and objectives and what the planning process will involve. At the same time they must be explicit concerning the need for public inputs and stress flexibility to accommodate and adapt to such inputs.

During this period, the public participation programme should emphasize information, interaction and dialogue. At the beginning the public may find it difficult to articulate their goals and objectives, but these will emerge as they have the chance to react to planning proposals, hence the necessity for a well-formulated information programme at the outset which will establish a framework within which the public can express its views. The interaction and dialogue aspect of the process is emphasized, since it is central to the establishment of a *trust relationship*; it provides the opportunity for both sides to exchange views and opinions, to get to know each other and it has a valuable built-in feedback component, i.e., the opportunity for immediate reaction. Public meetings and workshops may be appropriate mechanisms at this stage. It is suggested that an effort be made to evaluate the effectiveness of these meetings and workshops to refine the procedures, as these mechanisms will play an important role in later phases.

The information function can be fulfilled by means of prepared brochures and bulletins outlining the background data on the area, e.g., information on any agreements involving governments, the water resource problems as perceived by the planners, etc. Coverage by the mass media should also be encouraged.

DETAILED STUDIES AND DATA COLLECTION

This phase involves the gathering of detailed technical data, e.g., water flows, effluent discharge levels and water users. The compilation of socio-economic data is continued as well. There is a definite role for public involvement at this stage. Public representatives should be included in task forces working on the various sectors of the water management plan. In addition, an advisory group representing local interests may be organized to provide additional socio-economic data and input on public perceptions. Knowledge of the content and implications of the data as it is being collected can help to foster mutual

understanding between the planners and the public on the problems and priorities involved in the project. Where such understanding does not exist, further efforts on the planners' part to study particular problems and alternative means for dealing with them can be highly inefficient in terms of time and resource expenditures.

Contact should be maintained with local organizations and individuals to stimulate and broaden awareness of study activities. Again, the information, interaction and dialogue aspects of the public participation process should be emphasized. Also, this would be a good time to initiate surveys, if any are planned.

IDENTIFICATION OF ALTERNATIVES

On the basis of the socio-economic and technical data gathered and with due consideration for public preferences, the planners and public representatives attempt to identify the feasible alternatives for the implementation phase. The aim at this stage is to involve, within a fairly specific focus, representatives of those sectors and agencies of the public which will be most significantly affected by the final plan. Again, priority should be given to the interaction/dialogue function as characterized, for example, by workshop situations. A number of these could be organized with the help of local associations in each of the identified social systems in the planning area or basin.

Once the alternatives are selected, the emphasis is placed on presenting these to the general public. Thus detailed information both pro and con on each of the alternatives should be made available via news releases, television, radio, newsletters and special bulletins. Summary reports on the workshops and public meetings should be included in the information material to provide feedback to the general public and perhaps stimulate further involvement.

EVALUATION OF ALTERNATIVES

The functional emphasis in this phase of the public participation programme is the general public's review of, or reaction to, the identified alternatives. Opportunities should be made available for the people to state and explain their preferences for the different water management alternatives. In addition, there is a need for interaction and dialogue between the planners and the public to help increase mutual understanding. This lends itself to the working out of mutually acceptable modifications.

Forums or public meetings could again serve to fulfill the requirements for a two-way flow of communication, reaching a broad cross section of the public. The use of systematic procedures for recording the public *feedback* is very important at this stage. As mentioned, summary reports of the forums and meetings, pro and con evaluations of the alternatives, press releases, etc., would keep the public informed of current happenings in the study. Publicity regarding the alternatives should be extended via television and radio coverage. Audiovisual aids and standing displays would stimulate interest at the public meetings and graphically illustrate the proposed alternatives.

PRELIMINARY PLAN RECOMMENDATIONS

Following the evaluation phase, the planners make a recommendation as to what alternatives they feel are most satisfactory. This recommendation is once again submitted to public review and reaction. It is just as essential to explain why the other alternatives were rejected as it is to state why particular ones were selected. Also, it is suggested that the public inputs which contributed to the choice of alternatives be pointed out. The education and information function of the public participation process is still very important at this point in the programme for there are sectors of the public which will choose to become involved only when they are given something definite to which they react. Thus, there is a need for up-to-date information materials to provide an adequate background for these late comers. Plan recommendations should still be flexible and the planners must stress this fact in publicizing their recommendations.

Public meetings are an effective technique to obtain reaction from a majority of the affected public. The recommendations may also be submitted to the local advisory group (if used earlier in the study) to get their reaction and input as well.

FINAL PLAN PRESENTATION

Once again the information aspect is of key importance. All types of the mass media should be employed to ensure that the majority of the basin's residents are informed of the final decision and, as mentioned, the public inputs to the plan should be highlighted. If the information programme has been successful, the previous involvement phases well-directed and the public responsive, it is unlikely that new conflict areas will arise at this stage. Rather, it is expected that most of the public involved will take the opportunity to reiterate and reaffirm their opinions on the overall aspects of the plan or on points relating to their local areas. To channel the expression of these opinions, the more formal structure of a public hearing would be the most suitable mechanism to employ. In addition, public hearings have acquired a legitimizing connotation in the

eyes of the public, which also contributes to the effectiveness of the technique.

TIMING AND BUDGET

The public involvement process is designed to spread out over 30 months. The Flow Chart illustrates a programme of 27 months, allowing three months for unexpected delays. On the other hand, if no difficulties are encountered, the basin is fairly homogeneous, and the population knowledgeable and concerned with the water issues at hand, the process could be compressed into 24 months.

The main drawback of participation programmes in the past has been the lack of financial and staff resources. These resources are crucial if effective public involvement programmes are to be carried out. The participation budget should allow for a coordinator responsible for all aspects of the programme, adequate support and administrative services, and periodic training in participation and communication techniques for both the participation and planning staffs. Of course, this is in addition to costs incurred by proceeding through the steps outlined in the model.

It is extremely difficult to stipulate what proportion of the total basin planning budget should be allocated to public involvement. In the United States, the Corps of Engineers has been using ten per cent as a general guideline. The Environmental Management Service of Environment Canada needs to assess more thoroughly the suitability of such a rule of thumb for Canadian efforts in this area. At present, public participation programmes are underway in the Saint John, Qu'Appelle and Okanagan River Basins. The evaluation of these programmes, due to take place shortly, should provide some valuable clues as to realistic budget estimates for future programmes.

CONCLUSIONS

Examples of public participation in otherwise comprehensive water resources planning in the past are few. The development of systematic procedures for public involvement did not keep pace with the ever-improving technical designs. Canada has only recently become involved in public participation in this field, as a result of the Canada Water Act passed in 1970. This legislation can be viewed as a catalyst for including new concepts in the management of Canada's water resources. Notably, the Act provides the citizen or interest group with a statutory guarantee – that they be informed about given water planning and, in particular, water quality situations and that they be given an opportunity to make their views known to the planning agency or water quality management agency (Sec. 4(d), Sec. 13(1)).

Public involvement programmes are well underway in three river basins in Canada; in the near future, the scope of public participation in Canadian water management will broaden significantly in area and interest. Under federal-provincial agreements, other basin studies, including the Souris, Exploits, Mackenzie, Churchill and Ottawa, will include responsibility for active public involvement programmes in their proposals.

Owing to the pioneer aspect of these endeavours, they are considered to be somewhat experimental and many techniques and methodologies are being considered to evaluate the most appropriate. The aim of this report is to make a contribution in this area. A variety of techniques and a possible model for the involvement process in Canadian water management planning are presented for critical consideration by those most intimately involved in the challenge of evolving comprehensive water management plans with the active support of the public, particularly those affected by the plans.

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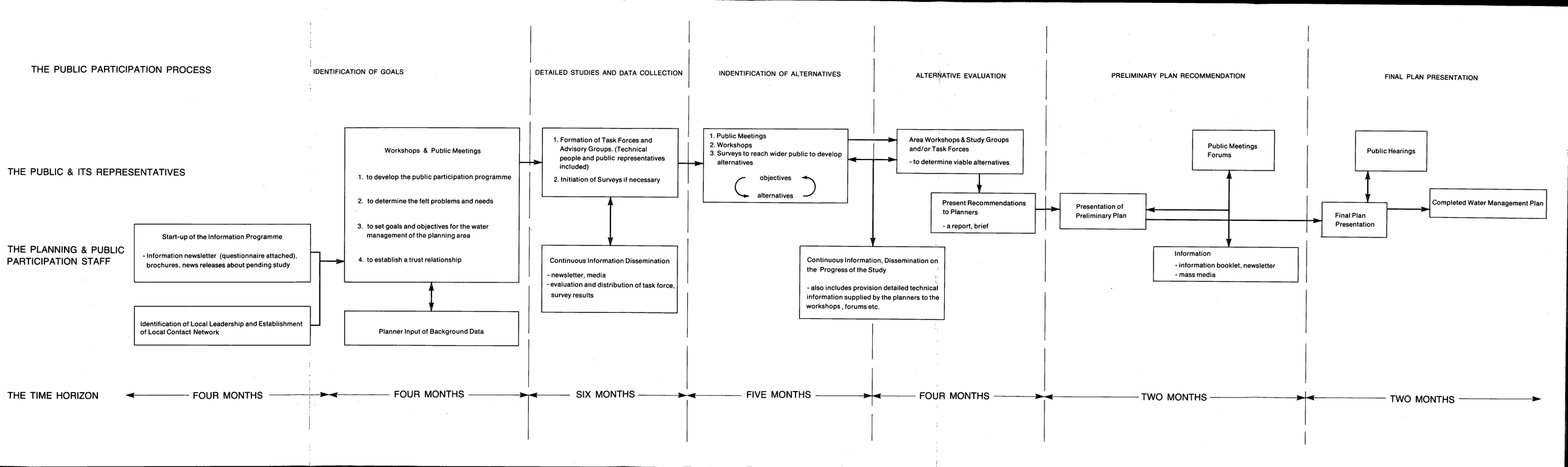
THE PUBLIC PARTICIPATION PROCESS
IDENTIFICATION OF GOALS
DETAILED STUDIES AND DATA COLLECTION
INDENTIFICATION OF ALTERNATIVES
ALTERNATIVE EVALUATION
PRELIMINARY PLAN RECOMMENDATION
FINAL PLAN PRESENTATION
THE PUBLIC & ITS REPRESENTATIVES
THE PLANNING & PUBLIC PARTICIPATION STAFF
Start-up of the Information Programme
- Information newsletter (questionnaire attached), brochures, news releases about pending study
Identification of Local Leadership and Establishment of Local Contact Network
Workshops & Public Meetings
1. to develop the public participation programme
2. to determine the felt problems and needs
3. to set goals and objectives for the water management of the planning area
4. to establish a trust relationship
Planner Input of Background Data
1. Formation of Task Forces and Advisory Groups. (Technical people and public representatives included)
2. Initiation of Surveys if necessary
Continuous Information Dissemination
- newsletter, media
- evaluation and distribution of task force, survey results
1. Public Meetings
2. Workshops
3. Surveys to reach wider public to develop alternatives
objectives
alternatives
Continuous Information, Dissemination on the Progress of the Study
- also includes provision detailed technical information supplied by the planners to the workshops , forums etc.
Area Workshops & Study Groups and/or Task Forces
- to determine viable alternatives
Present Recommendations to Planners
- a report, brief
Presentation of Preliminary Plan
Public Meetings Forums
Information
- information booklet, newsletter
- mass media
Public Hearings
Final Plan Presentation
Completed Water Management Plan
THE TIME HORIZON
FOUR MONTHS
FOUR MONTHS
SIX MONTHS
FIVE MONTHS
FOUR MONTHS
TWO MONTHS
TWO MONTHS

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