

Lao People's Democratic Republic
Peace Independence Democracy Unity Prosperity

**Awareness Plan in the Development, the Management
and the use of the water and the water resource**

Water Resources Coordination Committee

Planning for the creation of the public awareness in the development, the management and the use of the water and the water resource

1. Introduction:

1. Water is a magnificent natural resource, vital for maintaining the continuing existence of humans and the environment. It has an important role in socio-economic development allowing continual progress to society's goals.

2. According to the United Nation statistics, the population of the world is growing at an average rate of 78 million per annum. It is also estimated that at the end of the 21st century the world population will reach 22 billion, which represents an increase of about 373 % compared to the beginning of the century, when there were only 6 billion. However, the quantity of the water made accessible to man is finite, and will perhaps follow a diminishing trend. This is due to the fact that the reliability of some water resources is declining continuously, and in some cases, the resource is contaminated with pollutants to the extent that it is no longer useable. The situation of water deficit may worsen, and in the near future, may take on a greater dimension, if appropriate measures are not implemented to change inappropriate human behaviour that is causing harmful impacts to water. Water shortage can create an extreme severe disaster, more than crises other fields, since there is no other natural resource able to replace water. On account of the aforementioned viewpoints, the International Committee for Water launched a slogan: "Every effort must make to provide adequate clean water to all human beings in this 21st century".

3. Since the issues related to the development, management, use and preservation of the water are so complex and numerous, input by government agencies alone cannot reach the targets set, of providing adequate clean water for all in a sustainable manner. There is great need to involve Lao people of all ethnicities. All have to use water rationally, and unanimously change those wrong attitudes, which result in degraded water quality.

4. In order to have intensive participation of the people, it is crucial to raise awareness within both the people's conscience and that of the immediately accountable organizations. All must be able to understand how water is essential to management and development, and also to see the adverse consequence that could occur in the future. Nevertheless, past experiences in our country has undoubtedly proven that, if mitigation measures to control the management, development and use of the water and water resource are not taken in time - especially actions to upgrade the knowledge and to change the inappropriate behaviour of the people toward water, regardless the abundance of water resource in all parts of the Lao PDR - we will not able to avoid in some localities issues of water depletion, deterioration of water quality, lack of drinkable water and shortage of water for domestic use and for rearing livestock. While drought and flood events have always occurred in tropical zones, and there is no means to control these phenomena, their intensity can be expected to increase as a result of impacts of human activity on the environment.

5. Because of the aforementioned issues, the Water Resources Coordination Committee together with others concerned agencies have recommended a public campaign be integrated into the planning for the period of 2000-2005. Planning for greater public awareness has also been defined as a task in the ADB capacity building project, under the name of TA 3205-LAO, which is now close to completion.

6. A plan to create public awareness has been prepared through a consultation process with the assistance of concerned government agencies responsible for management and development of water resources and organizations specialized in education, information and cultural activities. Workshops were held to discuss and comment on the plan. The plan aims to raise awareness of the importance of water, and to demonstrate proper conduct for implementing development, management and use water and water resources. This conduct must match the policy of the Government: that protection and national construction duties related to water and water resources are the responsibility of all citizens.

2. Objectives

7. The main objective in creating public awareness is to increase the understanding of the importance of water and water resources and the vulnerability of these resources and the sense of right and wrong among Lao people concerning the development, management, use and preservation of the water. In the same time, this will allow public involvement to be implemented in an effective manner, for the well being of the people and the sustainable use of the water resources.

3. Present situation

8. The plan to create public awareness in the development, management, use and preservation of the water and water resources must be in agreement with the government policy on social and cultural aspects, and the Water and Water Resources Law. Planning to create public awareness must take in account circumstances other fields, such as:

- a) Potential resources, current water use, the balance between supply and demand and its future trend. At the same time it must anticipate various possible issues arising from the development, management, use and preservation of water resources.
- b) Administrative measures, regulations, laws and policy that aim to encourage public involvement in the development, management, use and preservation of the water resources.
- c) Experience from various water related fields about public awareness and from campaigns to encourage people to take a leading role in the development, management, use and preservation of the water resources.
- d) Customs, beliefs, the lifestyles of the people and the habits of the ethnic groups, which have positive and negative impacts on the management and preservation of the water resources.

3.1. Assessment on water resource and the use of water

9. Lao PDR has abundant water resources. The average rainfall in the country is about 1,650 mm per year. The average run-off per year to the Mekong River from the Lao territory is about 8,500 m³/s or equal to 35% of the total amount of water of the Mekong basin.

10. According to the international standards the quality of the water in all streams in Lao PDR are of good quality. The content of oxygen still generally high, the proportion of nutrients and the deposition of sediment is low compared with other rivers in the tropical zone. Nevertheless, in the future water quality may decline from the pressure imposed by population expansion in the cities and deterioration of the watershed caused by the destruction of the forest.

11. An investigation made in 1997 through remote sensing, revealed the forest cover in Lao PDR of about 47%. Reduction in forest cover is due to the slash and burn practice, unplanned logging activities, forest clearing to increase cultivation area, forest fires and others causes. The fact is that the watershed is deteriorating and if no measures are to taken - particularly shifting cultivation has a serious impact on the river system - water shortage during dry season and serious flooding in rainy season will result.

12. Abundant water resources in the Lao PDR provide favourable conditions for development, particularly in the hydropower and irrigation sectors. During the period of 1976-2000 hydropower has increased 5 times: from 247 millions kWh in 1976 to 1,187 millions kWh in 1999. Such hydropower development comes from the execution of hydropower projects of medium and large size which nowadays have a low impact on the environment since the public and the local authority were involved the planning phase of some large hydropower schemes participating in the studies of social and environmental impacts, and mitigation measures.

13. From 1976 until the present, the area of irrigated rice fields has increased by 40 times or from 2,700 ha to 110,000 ha. This has been achieved through the installation of medium and small irrigation pumps. The irrigation sector has made an important contribution by increasing the efficiency of rice production from 1.43 tons per hectare in 1976 to 3.27 tons per hectare today. This is another significant effort to alleviate the poverty of people living in rural areas and to achieve a goal set for food self-

sufficiency. Presently, the irrigation sector is working hard on the policy of transferring management responsibility to the water users, which is very necessary since the number of schemes has increased so quickly, raising acute concerns over the sustainability of the projects.

14. Almost 56% of the urban population has access to water supply. The water supplied through urban water systems originates from various rivers, including the Mekong River. Springs and underground water are used only in some towns. The project to supply water for 24 towns will be completed in year 2000 and a further project for water supply development and sanitation in 29 townships, which has started this year, will allow the urban water supply system to develop on a larger dimension.

15. Almost in many rural areas, the water supply comes from natural springs and underground water. During dry season when a stream has dried up, the artesian wells remains the principal source for supply water to the community in rural area. In order to provide clean water, in each year some hundred artesian wells and gravity water pipe are installed.

16. Fish production provides roughly 30% of livestock component of the gross national product. In general, fishing is a subsistence activity; however, commercial fishing occurs in few places, such as Nam Ngum Reservoir, along the Mekong River and its tributaries. The Department of Livestock and Fishery is cooperating with local Authorities to establish fisheries management with fishermen participation in hydropower and irrigation reservoirs.

3.2. Lessons acquired from real practices

17. The Party and the Government place great importance on participation of the population in the activities of the Nation on a long-term basis. The policy to devolve management authority has been entirely implemented. The authority to make decisions has been transferred to the Provinces, particularly for the preparation of the annual plans, and planning, implementing, operating and maintaining projects. Community service provision has been transferred to the local authorities and the community. Examples are: the provincial water supply, the irrigation water users, and committees to manage village water supply, etc.

18. Likewise, the forestry sector reflects another area, where in implementing forest inventory plans action to provide community participation well established with the cooperation of international organizations. In that cooperation, model included allocation of land and forest to villagers, involving them in protection, utilization and management. Right and responsibilities are predetermined in contracts between the Government and local villagers, specifying protection, concession, reforestation, and management activities to be undertaken by the village association. So far, the operation of the project has been effective in some provinces such as in the central zone: Savannakhet, Saravan; and in the Northern zone: Luang Prabang.

19. In several projects within the irrigation sector village participation is a major task for which numerous approaches have been adopted. The farmer-training project has an important role in improving living standards of the population in those areas where irrigation scheme exist. Indeed, it has had an appreciable result and helped the people earn more revenue. This project has conducted training courses for farmers in 14 Provinces, 59 Districts, 61 water users' communities and 90 villages, and increased the spirit of initiative and the attitude to participation. The project has reached 2,682 people, of whom 1,360 are farmers. Human development resource has been emphasised and trainers have been trained for the various sectors including irrigation, cultivation, livestock and fishery. The project has started in 1994 and until 1998 with support from the Government budget and assistance of the UNDP has trained 330 central and district level trainers, of whom 41 are female and 157 village level specialists.

20. Small irrigation projects managed by the villagers have also valued public participation by involving villagers in both planning and operational phases. The projects have been executed in 4 provinces: Vientiane, Bolikhamxai, Houa Phan and Xieng Khouang. Each has been lead by between 3 to 5 villagers of whom 30% have been female. These projects have a solid organizational structure providing good coordination with the central level, which provides advice and follows-up on a regular basis. These projects complied with regulations for management and use of the irrigation systems in the Lao PDR, and guidelines and rules of the water users association and for participation of the villagers in the development and improvement of the irrigation systems.

21. Nam Theun 2 Hydropower Project is a project that can serve as example for public involvement. In the last 10 years, Nam Theun 2 Project has organized about 200 public participation sessions, including workshops held in villages, districts, provinces and international arenas. Various approaches and methodologies, all appropriate and concurrent with the national standard and international guidelines, were used during these public participation consultations.

22. A project, conducted by the Unit for the Promotion of Fish Raising, that aims to encourage traditional fish rising, has accumulated substantial experience in public involvement. This project has been active in 5 Provinces. Fifty-three member groups have been established. Approximately 10 families form each group. The project encourages fish rising in ponds and in paddy rice fields, by teaching fish breeding, care of fish and fingerlings, and marketing. The project also provides low interest loans to their members, supported by advice and continual follow-up. The process followed by the project is to establish a model group in the locality and encourage creation of new groups.

23. Nam Ngum Reservoir Fisheries project has organized training for fishermen to promote development and improve management by splitting them into groups, and explaining correct fishing methods. The project gives each group member a membership card and grants privileges such as: providing fishing tools, low interest loans to enable the expansion of the activities, promoting credit, providing marketing assistance, and direct purchase for member's products, etc. Beside the fishing activities, the project has, with the cooperation of international organization and the Lao Women Union of the Province, organized 13 training workshops for some 350 persons from different districts within the province, where they learned on how to prepare foods using fishes caught from Nam Ngum reservoir.

24. The project for water supply and environment sanitation (Ministry of Public Health) has included villagers in all steps of proposed local development such as: evaluation of the local situation, analysis of data and evaluation of results of work, and so forth. The project has achieved knowledge transfer on subjects of negotiation techniques and exchange of ideas and viewpoints. In order to meet the agreed goal, the project water supply and environment sanitation has formed teams of 2-3 persons to explain about sanitation and health education at the central, zone level and provincial level. The project requires public participation in the various fundamental activities for development, in the proportion of Government 35%, population 65% from which consensus must be attained. This method still in use and will be expanded.

25. In addition to the various activities carried out by the water sector agencies, water related problems as mentioned above were also raised in the people conscience. The Mass Media Organization (Ministry of Information and Culture) has conducted publicity campaigns through various radio programs such as: "Farmer's Friend" on the National radio which is a broadcast on air 8:00 a.m., advertisement programs on television and so forth.

26. The lessons described above confirm all sectors have seriously contributed in mobilizing people to take part in water resources development. The achievement of a development plan, the effectiveness of the investment and the sustainability in technical and financial issues of any of the project depends on the active participation the users in the locality the decision and on their capacity.

4. Awareness Plan

4.1. Proposed public campaign

27. The proposed public campaign is to promote self-reliance and leadership to enable people to fulfil their duty in protecting water resources, to encourage behaviour for efficient and effective water use, and to enable change in those attitudes that result in a negative impact to the water resources.

4.1.1. Current issues

28. Previous public campaigns to promote self-reliance and leadership in the public to enable them to fulfil their duty in protecting water resources, and to change those attitudes which result in a negative impact to the water resources has been limited, particularly in the Government's mass media sector, which is responsible for public campaigns. In the water sector, activities have been project related and limited to each sub-sector. This could be related to the fact that there has been no organization

specifically accountable for the management of water and the water resources or the dissemination of water policy, and the implementation of the Water and Water Resources Law, water related laws, rules and regulations.

4.1.2. Main task:

29. The main tasks in the future will be to concentrate on coordination among the parties in the water sector to improve the public campaign with emphasis on the following:
- a) To develop and plan with the mass media organizations and the local authorities, the processes for disseminating and implementing water policy, the Water and Water Resources Law, and related decrees and regulations.
 - b) To encourage local radio and loudspeaker programs to include subjects related to regulations and laws on the use and conservation of water, including programs in ethnic minority languages.
 - c) To encourage and promote radio and television programs, and articles and advertisements in newspapers to prepare and include water related material, and to increase the volume of printing material such as posters and stickers, to encourage through their attractive appearance, the correct way to use water and water resources.
 - d) To organize meetings and face-to-face discussions with populations in remote areas to receive feedback during the dissemination of the policy and Laws, to hear and to record their needs for the purpose of further analysis and research to improve the situation. These meetings shall also provide encouragement and measures to improve attitudes concerning development, use, management and conservation of water and water resources.
 - e) To provide professional equipment to enable the production of audio-visual advertising material relevant to the requirements of each water sub-sector.

4.2. Public activities on important national and international days.

4.2.1. Current issues

30. The public activities, which aim to create awareness about some issue, have been carried out regularly during national or international days. They are organized as part of trade fairs, exhibitions, sport competitions, and have involved paintings, photograph and others. However, a public campaign on a water theme has not been actively organized. Each year during the International Water Day, only some of the water sub-sectors participated because they owned some facilities that enabled them to so act, or some other reasons. To give more value to these important days, it is recommended they be used as evaluation days for each sub-sector, in each field and also to provide an opportunity to congratulate individuals, organizations, manufacturers, on outstanding achievements in their work, as provided for in the Water and Water Resources Law. Social activities for the public and the water users, such as competitions and exhibitions, are an important method to build public understanding of policy and to encourage the public participation in the management, development, use and preservation of the water and the water and the water resources. Lessons learnt from the painting contest on the theme of water, life and the environment organized by the Water Resource Coordination Committee, were that the children were very keen to express their opinion, their awareness and their concern to water resources and the environment.

31. Until now, there has been no involvement of the private sector, which could provide funds to expand the exhibition activities, and to organize competition on important national and international days.

4.2.2. Main task:

32. In order to solve the above issues, focus must be on the following main tasks so that dynamic public activities can be promoted:
- a) To organize exhibitions on: products from agriculture, animal rearing and fishery; achievements derived from the development of water resources; the techniques on the rational use of the water and

the wastewater management. Exhibitions ought to be organized at each time in different places, or the exhibits collected altogether and displayed at one important focal point.

- b) To organize competitions in sport, painting, photographs, video reportage and articles concerning the management, development, use and preservation of the water and the water resources on the important national and international days.
- c) To organize formal events on those important national and international days to praise and to award prize to civil servants, individuals, companies, manufacturers for their outstanding accomplishment.

5. Principles for the implementation of the planning for the public awareness activities.

33. In order to make the following work program feasible, implementation must supported by Government directives and policy, and be appropriate to the needs of the Lao people of all ethnic groups in the country. Consequently, the following principles should be adhered during the implementation:

- The work program will be consistent and effective if:
 - It is consistent with the Water and Water Resource Law, the decrees for implementing the Law, and the draft water policy;
 - Coordination and consensus is maintained between all water and water resources related sectors and the local authorities;
 - It takes into account the particular aspects of the social culture of the ethnic groups in both urban and rural areas.
- To promote enthusiastic and dynamic participation of local authorities and the population in planning and implementation of the activities;
- All work plans must include activities to strengthening capacity and upgrade the knowledge of the concerned civil servants;
- To make use of appropriate media techniques so that information reaches the people in all ethnic groups, and on a regular and consistent basis, follow-up to evaluate the result of participation;
- To cooperate with the relevant sectors possessing expertise in public campaigns and advertisements, so that each sub-sector agrees to appoint public relation staff and organize their training;
- The Water Resources Coordination Committee has the primary responsibility for coordination of cross-sector activities.