



WOMEN'S PARTICIPATION IN THE SCALE INTEGRATED AQUACULTURE PILOT PROGRAMME (YEAR 1)

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Abstract

Rural Cambodian women in the SCALE Pilot Programme had an active involvement in all the aspects of integrated aquaculture investigated. Role divergence was seen between men and women in the level of participation for particular tasks related to integrated aquaculture. From the 16 families implementing integrated aquaculture farm-based trials (FBT's), women contributed to 31% of the total activity, while rest was shared by men 55% and children 14%. The percentage of involvement of women was in marketing fish, (45%) feeding fish, (38%) liaising with SCALE field staff, (35%) making technical decisions (35%) and harvesting fish (32%). There was a lower involvement of women in extension, food collection, pond construction and financial decision making with women comprising 26%, 25%, 15% and 10% of the total number of individuals working in each of these activities, respectively. An average of 73% of all the men, 40% of all the women and 6% of all the children from the FBT households were participating in each activity. The constraints and gender stereotypes women face and strategies to promote a more equitable women's involvement in integrated aquaculture and its extension are discussed.

Introduction

The SCALE (Southeast Asian Outreach Cambodia integrated Aquaculture on Low Expenditure) Integrated Aquaculture Programme is committed to facilitating the extension of appropriate,

farmer-proven integrated aquaculture systems (IAQS) to small-scale, resource-poor households in the Kandal Province of Cambodia. These IAQS were developed after an extensive baseline survey (carried out

over 14 months) which was designed to gather detailed information on the physical and socioeconomic environment of the farm households. This is one of a range of strategies designed to respond to the decline in Cambodia's freshwater fisheries production since the 1960's, with a view to make fish protein more accessible to the rural poor,

Central to the SCALE development strategy is an emphasis on farmer research. This includes use of farm-based trails (FBTs) owned and wholly managed by participating farm households. The farm households receive technical advice, credit supply and fingerling distribution support from the SCALE programme, but take full financial and decision-making responsibility. This empowers farmer research as the introduced IAQS are refined by the farm households to systems that are socio-economically appropriate, indigenised and sustainable. A household's refinement of the IAQS and its practice is closely monitored on the farm. The ownership and managerial capacity fostered through these trials, promote farmer's potential to actively extend their ideas to others. Through the support of farmer clubs, SCALE is seeking to promote the cross-pollination of proven IAQS by a

development process which is becoming increasingly farmer-led.

The objective of this paper is to investigate the division of labor and decision making within the households participating in the first year of the SCALE pilot programme. The comparative role of women is discussed. Possible ways to promote a programme that is able to facilitate understanding of and the potential to extend integrated aquaculture by men and women are explored.

Framework of Analysis

The data analysed was collected by a number of informal research methods drawing on conversations with the farmers and a range of farm-monitoring records and reports. The first year covered 13 FBTs, owned by 16 farm households, which were visited on a weekly basis.

Specific farm households were allocated to Field staff. Groups of three field staff visited their farm households on a weekly basis, from the time of pond or refuge trench construction until after harvesting, marketing and consumption of the fish. During each visit, the field staff discussed farming system issues with the farm household, gave advisory support using a

seeing and doing participatory approach and completed a detailed farm record to facilitate monitoring of the farm system. Weekly reports and weekly meetings to discuss FBT visits were also used to monitor the FBT programmes.

Nine major activities related to integrated aquaculture were selected for participatory evaluation. These activities were: pond construction and preparation, food collection, fish feeding, fish harvesting, selling or marketing of fish, extension of integrated aquaculture, technical decision making, financial decision making and liaising with the SCALE field staff to share technical information.

The involvement and number of individuals in each participatory category (men, women, and children) in each activity were recorded by the Field staff after completion of the pilot programme of year 1. Some activities had the participants and degree of labour recorded in the farm record, whilst other details were completed drawing from the weekly reports and staff knowledge of the households.

The calculation to assess the distribution of labor by class, i.e. the percentage of total work done by men,

women and children was carried out by dividing the total number of individuals from each class working on an activity by the total number of individuals working on that activity. The participation in aquaculture expressed as a percentage within each class was calculated by dividing the number of individuals of each class involved in each activity by the total number of individuals in that class. All the calculations assumed that each individual had an equal level of input.

The variable role of women

The 16 families surveyed, carrying out 13 FBTs, consisted of 16 men, 16 women, and 51 children. One family unit was headed by a widow and one by a widower. The remaining households consisted of two-parent households.

Percentage of work done by each participant class

The percentage of the total work done by each class for each activity is illustrated in Figure 1. The equal number of men and women involved in the FBTs allows direct comparison, but there is not weighing to compensate for the larger number of children within the households. (See Figure 2

for analysis by the number of individuals from each class).

These results show that men make up the dominant component of the work force for all the activities. 46% to 70% of the work force for each activity was made up of men (55% average). Women made up between 15 and 45% (31% average) of the total work force for each activity. Children were the least represented group, contributing between 5 and 26% (14% average) of the total labor force.

In considering the individual activities, some trends in the distribution of responsibilities can be seen. Within activities that have a large component of manual tasks such as pond digging, feed collection and harvesting, there are similar patterns indicating men carry out approximately 50% of the work, with women and children carrying out approximately 25% each.

The distribution of labor for feeding, technical decision making and discussing technical issues with the Field staff, which are closely linked technical components, show a similar pattern. While child involvement was low (5-12%) and women's involvement above average at 31% (33-

38%), men's involvement dominated with just over half of the inputs (52-62%).

Marketing and selling of fish shows the highest level of women's involvement, equal to that of men at 45%. Financial decision making and extension, both of which have a strong off-farm, socioeconomic value, are strongly dominated by men, who carry out 70% and 66% of the work for these respective activities. Women's level of involvement at 20% and 27% is far higher than that of the children (10% and 7%).

Level of participation within each participant class

Figure 2 illustrates the percentage of men, women and children involved in each activity. Men showed the highest level of participation, with an average of 73% of men in FBT households being involved in an activity. The highest involvement, with more than 90% of men involved, was in pond digging and preparation, harvesting fish, and making technical decisions. The levels of participation by women covered a range of 13% to 63% with an average of 41% of women in FBT households being involved in an activity. Marketing fish, harvesting fish, feeding fish and making technical decisions were all activities that at least 50% of the

women were involved in. Children's involvement was low, with an average of 6% of the FBT household children being involved in each family.

Is participation of women adequate - ? While men dominate most activities, women play a definite role in all aspects of integrated aquaculture. This role may be even more important when taking into account the women's traditional role as coordinator of children's activities (Arnvig 1994; Ledgerwood, 1994; Sonnois, 1990). However, the results are indicative of role divergence by gender that possibly show social inequalities and discriminations. Women have low financial decision making and extension involvement's and this may be indicative of a lower social and economic status

These findings conflict with the literature that repeatedly emphasis the Cambodian Woman's position as the one in charge of the household economy (Arnvig, 1994; Sonnois, 1990); "rural women in particular were notable for their independence, authority and resourcefulness in maintaining their households and handling economic matters" (Ebihara, 1990). This role is highlighted in popular Cambodian proverbs, for instance "Wealth is there

because the woman knows how to save and be frugal; a house is comfortable and happy because the wife had a good character". Popular mythology such as "the women with holes in her basket" expounds the behavior of the ideal Cambodian women as someone able to cook well, take care of children, be totally obedient to the husband, keep the family wealth and be in charge of marketing (Ledgerwood, 1994). Qualitative results from the SCALE baseline analysis suggest that women play a larger role in financial decision making. The extent of this role and an investigation into gender-related issues over control of household resources would be useful topics for further study.

There are large numbers of widows and wives of men handicapped as a result of land-mine and war-related injuries in Cambodia. The SCALE baseline analysis indicates that between 3% and 33% of households are headed by widows within the five areas surveyed throughout Kandal province (Dowall et al, 1993). These results are backed by Redd Barna reports indicating that women make up 60-65% of the population and that 30-35% of Khmer households are headed by women. UNRISD data indicates that Cambodia has 2-10 million land mines in its land and the highest proportion in the worked (4 per 1000) of

disabled people in its population, with 250-300 new injuries per month. Considering this, the potential of integrated aquaculture as a tool of rural development could be restricted if men are heavily relied upon to perform key activities. This is particularly evident in pond digging. Women's involvement in this activity was found to be low (15% of the pond digging labor was provided by women) and in all cases where women were involved; it was together with the men of the household/and or related to smaller levels of construction such as pond modification or construction of rice paddy refuge areas

In one case, a widow withdrew from the programme as the labor requirements were too high. In this case, there was only one young male in the house and a young child. She was busy with rice-growing, livestock-raising and other on-farm activities. The design of the IAQS to be labor-rather than capital-intensive so as to be accessible to the rural poor, further compounds such limitations. However, syndicate partnerships where the widow is a silent partner providing the land or other resources or where the labor is divided could be possible solutions to over-burdening widows.

Another activity that may have shown gender stereotyping was guarding the ponds. General observations from the Year 1 programme indicate that where active guarding used is a male's activity. However, the widow despite refusing to guard her pond, due to fears of evil spirits, was active in taking security precautions such as placing thorn bushes in the ponds to snag thieves cast-nets. The location of a pond is a major factor affecting susceptibility to theft. This may be a consideration in pond-site selection, especially in households headed by women.

The characteristic involvement of the whole family in integrated aquaculture suggests that extension and training should be tailored to reach each participating class. This may require challenging aspects of traditional extension methods such as visit times and lengths, the gender and background of extension facilitators and the use of creative methods to promote wider farmer participation in facilitating extension,

Literacy and educational barriers are also likely to be more predominant among women. 1990 figures show that Cambodian adult literacy rate is 22% for the female population and 43% for the males (Sonnois 1990).

Because women, especially those with children are often less mobile, the dynamics of farmer-led extension among women may heighten the importance of localized support systems using farmer clubs. Given the high level of involvement by men in extension, it is possible that there are some gender prejudices, either in receiving such information from women, or in the women's own perception of their ability to extend new ideas. If these assumptions are correct, then it should be asked how to appropriately challenge such stereotyping to promote and build the capacity of women to participate in extension activities. Specifically promoting women-to women extension might require different focuses and allow a better quality of interaction, but it could be an active step in reinforcing gender stereotypes. This raises difficult questions regarding cultural appropriateness and the level of outside interventions optimal in attempting to promote indigenised, sustainable development processes.

Weekly field staff visits involve working alongside the household members on each task, providing support by facilitating household initiative and active participation's in implementation. This is designed to overcome educational barriers. The 50-50 split of male and female field staff

supporting the FBT pilot programme should also empower both male and female FBT household members to develop their understanding and skills in integrated aquaculture. Thirty-eight percent of the women in the FBTs were involved in discussing technical information with the field staff (compared to 56% of all the men and 4% of all children in the FBTs). This indicates the need to further facilitate women's involvement in the technical aspect of their participation.

One strategy promoting this could be to encourage more participation by women in village farmer clubs. SCALE actively promotes women's participation in these clubs, but although one farmer club hosted by FBT households has a woman as its vice leader, the ratio of women to men attending farmer club meetings is generally less than 50:50. Possible ways to improve women's participation in farmer clubs need more study. These might include assessing the different perceptions or values that men and women have about the benefits of integrated aquaculture and also the competition between men and women in prioritizing fish use for family consumption or income generation. Evaluating the role of women in other aspects of aquaculture, such as pond security, fish processing and preservation

and spawning activities will also be tailoring of farmer clubs and extension strategies or activities could be carried out to appeal to a wider audience with the aim of involving men and women in appropriate, sustainable development.

Broader benefits of integrated aquaculture such as nutritional and family health benefits associated with eating fish or partial harvesting systems that could provide enough fresh fish for family consumption over a prolonged period are possible topics that could (given the woman's role as child raiser and cook) make integrated aquaculture more relevant and interesting.

Such strategies to promote greater equity between men and women in opportunities to learn about integrated aquaculture, and thus be more involved in decision making, may depend on the distribution of benefits within the family. However, the process of involving women in extension and participation may itself empower them in decision making. In turn may allow increased control in allocating resources. This approach aims at a more equitable and complete involvement of the whole family. The current workloads of men and women, however, must also be

important. Given this information, further accounted for and could be an important area for further study.

In literature on women's labor in Asian rice farming it is noted that women have a considerable manual input but would "benefit most directly when they have access to information about new technology and does control over household resources"(Unnevehr, 1983). Such ideals are not only limited to rice farming. Women and men working together in integrated aquaculture projects, with shared decision making and access to benefits, is an ideal that given the demographic and socio-cultural context of Cambodia, is likely to benefit the country's development.

Conclusion

Cambodian women play a definite role in all aspects of integrated aquaculture and have a wide range of other responsibilities within the household. In empowering men and women to be actively involved in integrated aquaculture, it is necessary to be aware of the gender values associated with integrated aquaculture and other cultural and educational systems of the country. This information has the potential to facilitate the tailoring of household and or FBT support and extension strategies to

promote men's and women's involvement in learning and / or teaching others about integrated aquaculture. This is also important to household management, resource-allocation and the decision-making process.

Given the high population of widows and the traditional responsibilities of women, finding active and culturally appropriate ways to promote women's involvement in integrated aquaculture is likely to enhance Cambodia's prospects for rural development.

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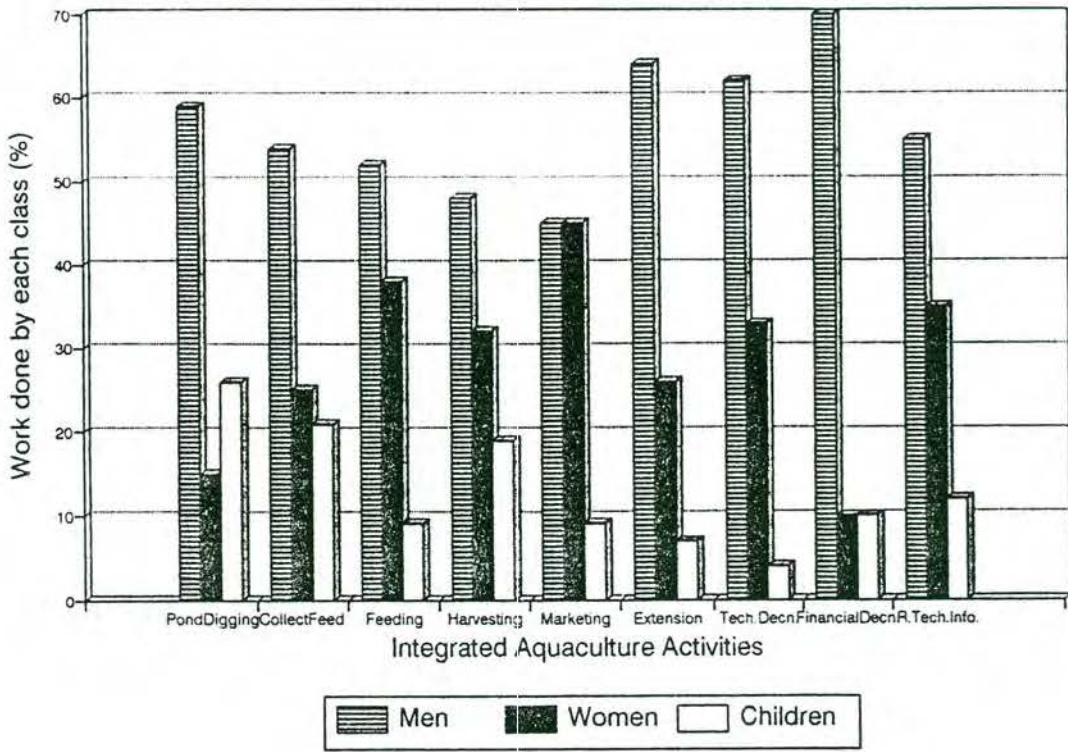


Figure 1. Labour distribution expressed as % of work done by each class

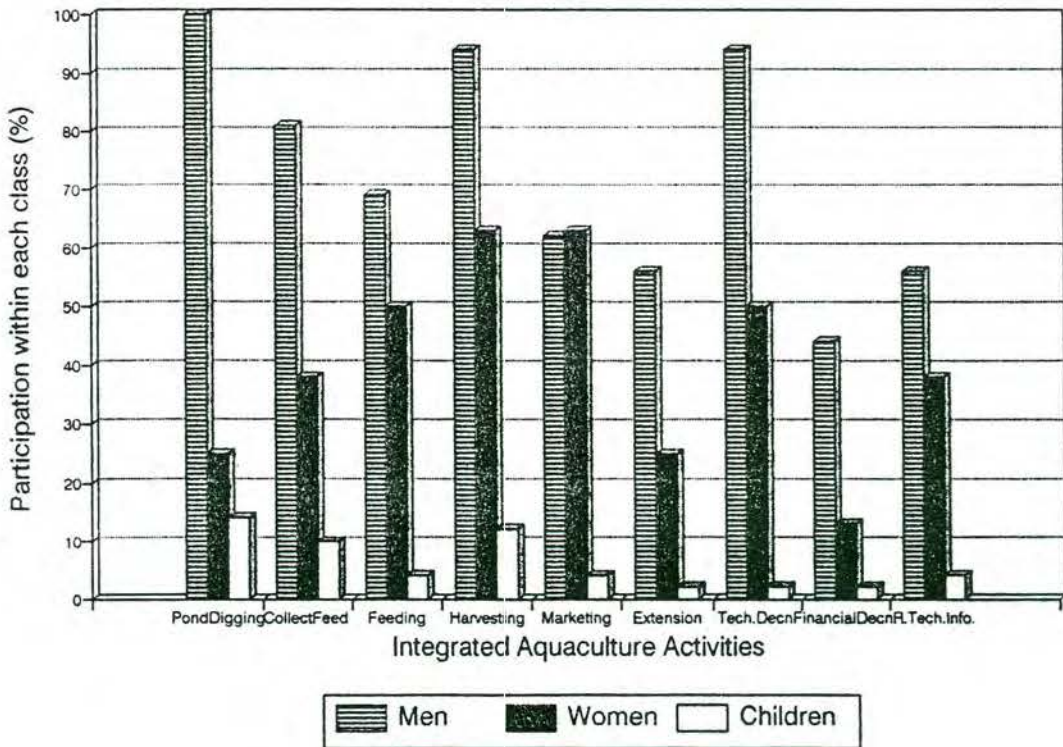


Figure 2. Participation in aquaculture expressed as % within each class

WOMEN ACTIVITIES IN FISHERIES IN SIEM REAP PROVINCE, CAMBODIA

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Abstract

In Cambodia, with nearly 65% of the adult population being women, they play a most important role in all spheres of social and economic life. Traditionally, in the Cambodian society, women play a central role in family maintenance and care of the children. Owing to long periods of war, the ratio of women headed families is very high. Because of poverty, women largely work in the labour sector to earn livelihood. In the fishery sector, women have been found to be active in fishing (32.59%), fishing lot operations, (27.27 - 28.57%), seine net operations, etc., fish culture (37.31%), while in fish processing activities they are found to play a major role (82.35%), as in decision making (90%) and in fishery marketing (88.03 - 88.18%) activities.

Introduction

During the two decades of internal unrest and the Khmer Rouge regime about 1.5 to 2 million people are estimated to have died in Cambodia. As per the estimates, economically active population is estimated to be about 3 million and the ratio of females among the total adult population is estimated to be 64 percent (ECFA, 1992). Nearly half of the country's population is under 15 years of age.

The province of Siem Reap, located in the north western part of the country, has

been severely affected by war. Much of the infrastructure such as schools pagodas, temples, roads, etc. were destroyed during the war. Men were also killed resulting in a large number of women headed households. Women are considered equal to men by the constitution.

In the fishery sector, women contribute to all activities namely, fishing gear preparation, fishing, fish raising, fishery education and play a dominant role in fish processing and marketing.

Women activities in fisheries

Materials and Methods

According to a recent survey carried out by the Siem Reap Provincial Office of Fisheries (POF), women have been found to play an important role in many areas. The survey was conducted by collecting data from all the fishing villages located in 5 different districts bordering the Great Lake. Data was also collected from the large scale fishing units such as fishing lots, from medium scale fishing units such as gill net, seine net, drag net and from small scale or family fishing activity such as gill net, scoop net etc.

50 women in 4 different villages were interviewed about fish paste processing operation and their role in decision making process of the business.

Results

Fish production

The province of Siem Reap occupies the largest area of the Great Lake among the 6 bordering provinces. The fishing area is divided into 7 fishing lots, 1 fish sanctuary and a vast area of fishing domain protected for medium scale and subsistence fishing.

Fish production is very important for local consumption as well as for export. The total fish catch from this province between 1980 and 1994 varied between 3000 and 9700 tones/year. The lowest production was recorded during 1980 which was the year during which the activity was commenced after complete destruction of the resources by Khmer Rouge regime. (Table 1). Aquaculture is an important activity in the province and its contribution varied from 120 to 1200 tones during 1986 to 1994 (Table 2). The fishery business provides job opportunities for over 3,411 families living in and around the great lake (Table 3). In these fishermen community women form an important component and they are engaged in fishing gear preparation, fishing, fish raising and fish processing activities. Nearly 26.23% of all the existing fishing households are headed by women.

Women in Fisheries

According to latest statistics, in the Siem Reap Provincial Office of Fisheries there are 6 women from among the. Among those, two of them are educated in fishery and agriculture; one in accounting course and two other women have completed secondary school and one women has finished primary school. In regard to their responsibilities, 3

women head the sections (chief of administration, chief of exploitation and chief of planning and accounting section) representing 50% of the total 6 sections in the Provincial Office of Fisheries. At the district, commune and village levels, women were found to be nearly absent from the role of leadership,

Traditionally, women have played a major role in the preparation of food for the family while male members have earned income through the paid employment. This has resulted in women having relatively more free time to care the family and nurture the children. They play a very important role in the education of children. The family being closest to the children they first learn on all aspects of behavior and life from the mother. Women are also equally responsible for the entire activity of fish processing. In fact, children learn indirectly about fish processing techniques when they are growing at home and as they grow boys specialize in fishing, while girls continue fish processing.

Women who work as hired labor in fishing lot operations are generally single or widows with no children. Due to difficulties involved in taking care of children, they leave the children with their grand parents or relatives when they go to work. Those

women working in fishing lot are the poorest of the poor. This category constituted 32.59% of the total labor force engaged in fishing lot operations (Table 4). In Kompong Kheleang commune, Soth Nikum district, the largest floating commune of the province, women constituted 33.87% of the total labor force (Table 5). They are involved in fish raising (37.31%) and 70% in fish processing 26.31% of the total labor force involved in fishery activities. The percentage of women working in fish raising and fish processing is 37.50% and 41.66% respectively (Table 6.)

According to the interview conducted with women fish processors especially in fish paste processing, women were found to play a major role in decision making. They were responsible for the whole process of fish processing. They represented 82.35% of the total labor force engaged in fish processing.

In the area of fish transportation from the fishing areas to markets, women represented 88.18% of the total transporters. In various markets, 88.03% of women dealt with fish and fish by-products (Table 7)

In the field of conservation and management of the resources, all the women interviewed were found to be not aware of issues related to the area. Though they have

some idea on conservation for sustainable use of the resources, because of long period of war and poverty, they are compelled to find resources to the maximum for survival. Hence, they undertake illegal activities like fishing during the closed season, cutting of inundated forests for fuel wood, etc.

Conclusion

In the fishery sector, women have been found to play a major role in all fishery activities such as preparation of fishing gears (bamboo fences, nets etc.) fishing, fish culture raising, fish processing and fish marketing. In general, there were 3 categories of women involved in fishery activities:

- Women housewives who were responsible for keeping houses and manage the fishery business at home when their husband went out to catch fish to support the family. This groups of families were generally well-off, could educate their children and provide good opportunity for them to grow.

- Large scale fish processors could also take care of the children and educate their children similar to the first group. They were generally better off. They also take positions of power in fish processing and in decision making.

- Women laborers who work as hired labor in fishery business are generally poor. They have less opportunity to care for their children and provide them good education. They represent a major segment of women working in the fishery activities and it is wiser to help women belonging to this group. They spend more than 8 hours a day in water, work in fishing or fish processing sector.

As women are involved in all fishery activities, it is necessary to formulate policies which would help women. Women should be educated on the concepts of conservation and management. Fishery resources would be depleted if over-fishing or usage of destructive gears. are continued. To educate fishermen on these critical points, non-formal learning centers such as provision of floating library in each with information on resource conservation would be useful.

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Table 1. Total fish production and processed fish in Siem Reap (1980-94) .

(Source: Provincial Office of Fisheries, Siem Reap, 1994).

Year	Total catch	Salted dried fish	Fish paste	Fermented fish	Smoked fish	Fish sauce	Dried shrimp (t)
1980	3000	350	150	-	21	-	-
1981	7919	949	92	-	3	60	-
1982	8266	1365	677	59	30	128	-
1983	8201	1096	488	180	36	95	-
1984	7932	780	618	142	36	90	-
1985	8500	880	700	132	51	40	-
1986	9041	943	906	91	116	41	-
1987	9575	1140	830	325	143	37	-
1988	8990	760	1048	381	120	59	-
1989	8200	1008	701	143	113	63	-
1990	9450	657	679	150	116	70	-
1991	9000	695	893	155	214	81	8
1992	9760	307	646	329	200	31	40
1993	8800	240	626	126	237	27	-
1994	7500	176	1046	746	151	53	14

Table 2. Aquaculture production in Siem Reap province 1984-94 (Source: POF Siem Reap, 1994)

Year	Table fish (Tons)	Fingerling (Head)
1984	471	
1985	120	
1986	150	
1987	373	
1988	168	
1989	1008	
1990	733	
1991	1200	
1992	1143	
1993	1110	
1994	620	10,000

Table 3. Number of families in fishing villages in different districts bordering the Great Lake with information on percentage of female headed households. (Siem Reap province, 1994).

No	Village	Commune	District	Total	Female	Male	%
1	Omali	Sambour	Kralanh	63	16	47	25.39
2	Damnak	Sambour	Kralanh	246	65	181	26.42
3	Anlong Sar	Sambour	Kralanh	55	18	37	32.72
4	Kok Kroch	Sambour	Kralanh	140	46	94	32.85
5	Po	Po Treay	Pouk	80	25	55	31.25
6	Treay	Po Treay	Pouk	70	15	55	21.42
6	Meehrey	Keo Poar	Pouk	104	18	86	17.30
8	Chong Khneas 1	Chong Khneas	S.R. Town	201	92	109	45.77
9	Chong Khneas 2	Chong Khneas	S.R. Town	246	65	181	26.42
10	Chong Khneas 3	Chong Khneas	S.R. Town	137	32	135	23.35
11	Chong Khneas 4	Chong Khneas	S.R. Town	136	64	72	47.05
12	Chong Khneas 5	Chong Khneas	S.R. Town	101	64	37	63.36
13	Chong Khneas 6	Chong Khneas	S.R. Town	70	24	46	34.28
14	Chong Khneas 7	Chong Khneas	S.R. Town	75	74	01	98.66
15	Kok Khdol	Kg. Phloulk	Siem Reap	100	18	82	18.00
16	Thnot Kombot	Kg. Phloulk	Siem Reap	118	22	96	18.64
17	Dey Kraham	Kg. Phloulk	Siem Reap	118	18	100	15.25
18	Chey Chet	Kg. Khleang	Soth Nilum	72	19	53	26.38
19	Taour Sar	Kg. Khleang	Soth Nilum	133	25	108	18.79
20	Chamcar Yuon	Kg. Khleang	Soth Nilum	126	26	100	20.63
21	Spean Veng	Kg. Khleang	Soth Nilum	122	18	104	14.75
22	Muk Vat	Kg. Khleang	Soth Nilum	115	21	106	18.26
23	Phsa Khleang	Kg. Khleang	Soth Nilum	167	26	141	15.56
24	Prek Sramoach	Kg. Khleang	Soth Nilum	217	18	199	8.29
25	Ta Chranieng	Kg. Khleang	Soth Nilum	147	26	121	17.68
26	O Tapur	Kg. Khleang	Soth Nilum	132	15	117	11.36
27	Roteang	Kg. Khleang	Soth Nilum	80	15	65	18.75
28	Moat Khla	Kg. Khleang	Soth Nilum	40	10	30	25.00
	Total			3411	895	2558	26.23

Table 4. Total number of people engaged in fishing lot operations 1994.

No fishing lot	Total	Female	Male	Percentage
1	18	6	12	33.33
2	25	6	19	24.00
3	30	7	23	23.33
4	80	40	40	50.00
5	85	30	55	35.29
6	70	20	50	28.57
7	100	24	76	24.00
Total	408	133	275	32.59

Table 5. Total number of people engaged in medium and subsistence fishing in the commune on Kompong Khleang, Soth Nikum district, 1994.

No	Fishing gears	Number	Labors	Male	Female	Percentage
1	Seine net	5	55	40	15	27.27
2	Lop trap	80	240	240	0	0
3	Long lining	11	33	33	0	0
4	Gill net	520	1560	1050	510	32.69
5	Tree branches	200	400	200	200	50.00
6	Fish raising	135	402	252	150	37.31
7	Fish Processing	20	100	30	70	70.00
	Total		2790	1845	945	33.87

Table 6. Total work forces engaged in medium scale and subsistence fishing in the commune of Chong Khneas, Siem Reap town, 1994

No	Fishing gears	Number	Labors	Male	Female	Percentage
1	Seine net	10	280	200	80	28.57
2	Lop trap	35	140	100	40	28.57
3	Long lining	100	200	150	50	25
4	Gill net	15	45	40	5	11.11
5	Tree branches	20	40	25	15	37.50
6	Fish raising	20	60	35	25	40.66
7	Fish Processing	45	90	80	10	11.11
	Total		855	630	225	26.31

Table 7. Number of work forces dealing with fish transports from the Great Lake to markets and fish mongers in Siem Reap markets, 1994.

No	Means	Total	Male	Female	Percentage
1	Fish transports	127	15	112	88.18
2	Fish mongers	209	25	184	88.03

THE LOWER MEKONG BASIN FISHERIES AND GENDER ISSUES

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Introduction

The Lower Mekong Basin covers a total area of over 600,000 km² in four countries namely, Cambodia, Lao PDR, Thailand and Viet Nam. The Basin is rich in natural resources, especially water and agricultural lands, although some of the countries therein are currently ranked among the poorest countries in the world. Population in the Basin is approaching 53 million; more than 50% of this population consists of women. However, from the economic view point the majority of the people in the Basin are still very poor, i.e., with the per capita income being in the range of only US\$200 per year. Poverty problem is generally worse in rural areas of the Basin.

To solve the poverty problem, a large number of developmental projects aiming principally at an increase in cash income for the rural poor have been/are being carried out by the government departments concerned as well as other agencies, including the Secretariat of the Mekong Committee. However, not all the development projects which have been completed so far have been effective in settling the poverty problem and

therefore, the poverty problem remains largely unsolved.

Lack of "women's participation" planning and implementation of project is often quoted as a major reason for the poor end results obtained with some of the completed projects. As a result, topic on "women in development (WID) have become an important topic for discussion and recently, a more common term like "gender issues" is used owing to the fact that for many of the grassroots problems both "men" and "women" are equally important and should be actively involved to find solutions to those problems¹.

The Mekong Committee has been in operation for nearly 40 years since its establishment in 1957. Like in many other cases, women's participation in the Mekong development projects has been relatively limited. Many types (irrigation, agriculture, fisheries, etc.) of development projects have already been implemented by the Committee.

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The views expressed in this paper are of the author and do not necessarily reflect views of the Mekong Secretariat.

Its development efforts have also been shifted from subsistence economy in the early years towards improvement of the quality of life at the present and in this connection it is believed that as an efficient way towards the goal, "gender issues" are required to be addressed in as early as the planning stage of projects for the development of water and related resources in the Lower Mekong Basin and this is the main mandate of the organisation.

It was observed that in the four riparian countries of the Lower Mekong Basin, many organizations related to women have already been established at different levels with a common objective to promote women's economic productivity as well as strengthen their social and political status in societies. They are, for example, the Lao Women's Union, the National Commission on Women's Affairs of Thailand, the Vietnam Women's Union and lastly, but not the least, the Women's Association of Cambodia. Effectiveness of these organizations and their experiences need to be studied.

At the project level, the Mekong Secretariat is planning to carry out an important study on the subject with the major objectives, among others, to formulate a common strategy and corresponding guidelines to enhance the role of women specifically in water resources development and an action plan to implement the proposed strategy. Although scope of the study is limited it should be relevant also to discussions being made at the present Workshop and in particular, the discussions on planning and

managing development projects at field level. The study is expected to be funded by a donor country in the near future.

Apart from the above, mention should be made on some suggestions made by a preliminary study related to "gender issues" in the four riparian countries of the Lower Mekong Basin, undertaken in 1993 by the Secretariat. The suggestions, which were made on the basis of information obtained from field missions to the countries, could be considered as important factors that could help realizing effectively the development projects:-

- Necessity of involving all concerned (including women's organizations and women beneficiaries) in a dialogue at all stages of the "project cycle":
- Changing in the attitude (through sensitization on gender issues) of the policy-makers and planners; and
- Building the development plan(s) on realities of women's lives.

However, to promote effectively the role of women in the development processes, many more studies should be carried out by all concerned to ascertain their strength in different projects/activities and fields. The knowledge will be important for future project plannings or decision-making by policy-makers and/or planners. As a matter of fact, there is not any good blue-print at present for integrating women/gender issues in the planning processes.

Lastly, results of the present Workshop are expected to be useful not only to the participants of this workshop, but also to the Mekong Secretariat, as the discussions will focuss on women and the fisheries of Cambodia which is a member state of the Committee. It is expected further that a lot of information related to the national plan on these issues and in particular, the government policies on women at the "grassroots level" could be obtained. As a society where in women constitute the major part of the active labour force in the rural area, Cambodian experiences in this respect would be of great help in planning the activities.

ATTACHMENT 3

WOMEN IN CAMBODIA*

General

Cambodia is predominantly an agricultural based country with an area of 181,035 km². The population of 8.8 million is largely homogenous: over 90 % is ethnic Khmère and similarly, over 90 % of the population is Theraveda Buddhists.¹ The important minority groups are Vietnamese, Chinese, Cham, Malay muslims and over 30 different highland ethnic minorities.² More than two-thirds of the population live in the Central Plains wherein the Tonle Sap Lake and the Mekong River are an important source for the life of the people..

The tragic events of 1970-1979 and the ongoing hostilities have left Kampuchea with 60 to 65 percent of adult women population and 30 to 35 percent of households are headed by women.³ The imbalanced ratio between men and women is causing polygamy where women have to share husbands with other women. Though polygamy is illegal but it is fairly widespread. Divorce and separation are legal, but are not accepted socially.

The constitution states that men and women are equal and that women should participate fully in the political, economic, cultural, social and

family life as equal to men. It guarantees that women will be liberated from family constraints and brought into development to enjoy equality before the law and in life. Socio-economic equality is ensured by the principle of equal pay for equal work.⁴ The situation is different in practice since there are no mechanisms to enforce the principles of equality stated in the constitution.

Agriculture and Fisheries

Agriculture dominates the Cambodian economy, accounting for nearly 45 percent of Gross Domestic Product (GDP) and 85 percent of the labour force. Rice is the predominant agricultural crop and food staple. Seventy percent of the animal protein consumed in Cambodia is provided by fisheries, half of its production comes from the Tonle Sap Great Lake. The country also produces and exports rubber, timber, beans, vegetables, and tobacco. It is estimated that the 1992 harvest from the logging concessions is four to five times more than the sustainable yield with regeneration and reforestation. The main imports are food, fuel, fertilizer, raw materials, equipment and spare parts.⁵

Family Planning

An increasing number of women and men would like to have smaller families for economic reasons but they do not know the methods. The government has no budget to provide services in family-planning to the citizen. The higher birthrate (40 births per 1,000 population in 1988) has major consequences on women's health and economic burden. It is generally estimated that the number of children per mother is five, and many women have between six to ten children.⁶

Education

During the Khmer Rouge regime (1975-78), formal education was abolished, and teaching materials, textbooks and publishing houses destroyed.⁷ Large number of qualified technicians, doctors, teachers and students either fled the country or died. Schools were closed with the exception of a few vocational training centers.

In 1988, the government attempted to improve the illiteracy among adult covering over 1 million people of 13-45 years of age and of which two-thirds were women. The Women's Association of Cambodia played an important role in mobilizing women to attend the literacy classes. The classes consisted of a six-month course of one-hour a day given by volunteer instructors.

Politics

Women are under-represented in politics and in decision-making of national importance. A

few women are ministers or similar ranks (the Minister of Industry, President of the Women's Association) and vice-ministers or similar ranks (Vice-Minister of Health and Vice Minister of Foreign Affairs). Eighteen women are members of the Council of the National Front for Defence and Edification of the Kampuchean Motherland. Twenty-one women (out of 117 seats) are members of the National Assembly. Of the estimated 10,000 Party members, only 528 of them are women.⁸ The main channel for women to participate in politics is the Women's Association of Cambodia. However, the Association has had little influence on national policies.

The Women's Association of Cambodia

In 1978, the Revolutionary Women's Association of Kampuchea (RWAK), a mass organization, was created at the same time as the Liberation Front.⁹ The organization became operational in 1979 when the country was liberated. The organization's political objective is to explain government policies to women and to obtain their support and participation in implementing these policies. In May 1989, the RWAK's name was changed to the *Women's Association of Cambodia (WAC)*. The WAC is committed to promote equal rights, to encourage women to participate in all aspects of political, economic, social and cultural life of the country, to increase the educational level of women and to improve the welfare of women and children.

The WAC is the only governmental organization that has a fairly wide operational network down to the village level. The organization has a well-organized structure at all levels of the government's organs in urban and rural areas: 100 cadres at the central level, 10-15 at the province, 5-8 at the district, 3-4 at the sub-district, 2 at the village, 1 at the "solidarity group" in the countryside, or the neighbourhood level in towns. All women in the country whose ages are above 18 are supposed to be members (totalling some 1,800,00). At the central and provincial levels, the Association has 4 Departments: Administration, Organization (personnel), Propaganda and Education (i.e., political mobilization), Protection of the Interests of Mothers and Children (i.e., welfare). The central level has also a Department of External Relations and a Publishing House. In addition, each government office, enterprise, plantation, school and health center has WAC representatives who are in charge of mobilizing women who are employees of the government.

The WAC receives membership's fees (1 riel/ person). This constitutes a partial budget of the WAC. The government pays the salaries of cadres down to the sub-district level, at the same rates as for all other civil servants. The village and group staff are volunteers. The WAC has organized general training sessions for its cadres. However, the WAC suffers from a shortage of qualified and experienced personnels at all levels. Although it still lacks of funding and skills to effectively plan and implement projects, it is currently the only

active governmental body that extends to the village level.

References (2)

1. *Cambodia: Socio-Economic Situation and Immediate Needs*, Asian Development Bank, International Monetary Fund, United Nations Development Programme, and World Bank, May, 1992, p.7.
2. Han C.J. Blom, and Paul G. de Nooijer, *Focus on Higher Education and Vocational Training in Cambodia*, Report on a Nuffic Fact Finding Mission. The Netherlands Organization, NUFFIC, The Hague, February 1992, p.6.
3. Brigitte Sonnois, *Women in Cambodia: Overview of the Situation and Suggestions for Development Programmes*. Redd Barna-Cambodia, July, 1990, p.2.
4. *Ibid*, p.3.
5. *Cambodia: Socio-Economic Situation and Immediate Needs*, Asian Development Bank, International Monetary Fund, United Nations Development Programme, and World Bank, May, 1992, p.7.
6. Brigitte Sonnois, *op. cit.*, pp. 5-6.
7. *Cambodia*, *op. cit.*, p. i.
8. Judy Ledgerwood, *Women in Cambodia: Research on Wsomen in Khmer Society*, UNICEF, Phnom Penh, June, 1992.
9. Brigitte Sonnois, *op. cit.*, pp. 43-58.

ATTACHMENT 4

GENDER ISSUES: FACTORS FOR EFFECTIVE PLANNING AND IMPLEMENTATION OF DEVELOPMENT PROJECTS*

Introduction

Women's perspectives are largely absent in development planning. Frequently, women are unintentionally overlooked because policy makers and planners are not aware that certain development policies and programmes affect women and men in fundamentally different and unequal ways. Women and children are usually regarded by planners as dependent of men, and planners assume that men are the main income earners in families. In reality however, both men and women, and sometimes women alone, are responsible for the survival of poor households. Women are concentrated in the lower ranks of the various target groups; often the benefits of policies and programmes geared toward the mainstream of society just do not reach women.

Women in the four riparian countries of the lower Mekong basin, namely, Cambodia, Lao PDR, Thailand and Vietnam, play an integral role in the countries' social, cultural, and economic development despite the many constraints they continue to face. At present, women in the Basin compose slightly more than half of the population as

well as at least half of the economically active population. Although the majority of women are the main labour force in agriculture, they are also active in commerce, communications and services, and in manufacturing industries but at the lowest income levels. As the economy in the area expands (also as a result of the so-called New Economic Mechanisms in the Lao PDR and Vietnam) and diversifies, the integration of women's contribution into national development processes and the assurance of their access to productive resources as well as to the benefit of their work remain pressing issues.

In the past, most agencies mandated to strengthen the role of women regarded women as mere housewives, responsible only for home-management activities: food preparation and preservation, household maintenance, health and sanitation. Not sufficient importance is given to the role of women in development of water resources, agricultural production, management and marketing. A similar situation was observed in the work of the Mekong Committee.

To improve the situation, a preliminary study was carried out by Dr Sutcera Thomson, consultant, in early 1993, to formulate a detailed project proposal for studying *the role of women in development of water resources in the basin*. During the course of study, the consultant has made visits to all the four riparian countries and, gathered a lot of information on women in development and related gender issues in the countries.

Important observations and findings

The consultant has made a report saying that currently, women in the countries are still facing many difficulties. There were evidences showing that farm women did not have adequate access to information on and training in new technologies. Many of these technologies and tools could have benefitted women farmers a lot more if they were appropriately modified and made available. Instead, since most of the agencies involved did not consider women's work in farming, the *resources* needed by women were often directed to men. The exclusion of women farmers from agricultural development programmes has had and continues to have several detrimental effects. It retards agricultural productivity and prevents rural incomes from rising as fast as they would if both men and women were taught to improve farming methods. Moreover, it creates a growing gap in the earning power of men and women. As a result, women consider farming less and less worthwhile.

On the basis of the above, the consultant has raised many questions. For example

- How can we help women to see a future in the rural area?
- What can policy makers and planners learn from successful rural women?
- What are key factors that make rural women successful?
- What impact could these successful rural women have in bringing about a change in attitudes of planners and policy makers?
- What environment would be more conducive for dialogues between rural women and decision makers?

To the consultant, the above are questions that need to be addressed when working out a strategy and design of development activities.

Conclusion and recommendation

The consultant concluded that the four riparian countries have a lot of problems relating to the gender issues and in fact, many of the problems are common to all. The consultant thus recommended carrying out a more in-depth study and at an early date with a view to understand fully potentials of the women in the basin and their possible roles in participating in the development of its water resources. It is expected that as a result of the implementation, it will help promote the optimum use of the resources and the maximum benefits from the potentials of the women in development activities. Furthermore, the consultant

made the following suggestions and recommendations.

1 The strategy

One of the most important strategies that should be adopted is to engage top policy makers and planners involving in the development projects, project implementors/executors, national women's organizations and beneficiaries (the women themselves) in a dialogue. It is strongly believed that this process is fundamental to consider the actual and potential roles of rural women, i.e., to meet the women's needs effectively, enhance their productivity and ensure their access to development resources and benefits.

It was further pointed out that during the processes of project's implementation, the followings questions be clearly clarified:

- How can such diverse groups of people work together effectively?
- What strategies should be used to convince those involved of the benefits of mainstreaming women in the programme and project planning?
- How can we a broad consensus be created among key players in the project/program development?
- How can other policy makers and planners be involved in the process of broadening our base of support and commitment to strengthen the role of women in national development?

- How can agents be effectively used to reach key change agents in the village to maximize the impact of project implementation?
- How should we design our activities to reduce gender imbalances, to effect changes in societal attitudes and stereotypes, to raise awareness of all concerns on specific issues, to test some hypotheses, and to network among people?

It should be added that as an effort to study some of the questions mentioned above, at the start, the consultant consulted a number of people in each country concerning protocol, identified key change agents in each agency involved (at both the senior and the middle levels) and assessed attitudes towards women of top decision makers. It was found that most senior officers recognized that women work hard on the farm, in the field, and that their productivity is low. They would rather support women to be good housewives and domestic workers than to be good farmers. Thus, strategies need to be worked out in this respect to make the senior officers implementing the Mekong development projects adopted policies on gender and development.

2 The Approach

In implementing development projects, a *participatory process* should be adopted for the operations at all levels. These include project identification, setting priorities on activities,

formulation and implementation, monitoring and evaluation. Women should participate actively at all levels.

The *positive approach* should also be established through the use of successful cases. Attempts should be made to understand factors that contribute to the success, and how the problems or obstacles were/are being dealt with. These examples will provide a framework and directions for planners and will facilitate the learning of villagers with similar situations. Moreover, it will build-up the villagers'/women's confidence.

A number of gender-responsive skills is needed in handling different issues. Apart from the skills related to project's cycle, i.e., *project identification, formulation, implementation, monitoring, and evaluation*: additional skills are required for *problem-solving, consolidating ideas, consensus-building, establishing commitment, and broadening base of support*.

3 Key Planning and Implementation Issues

The integration of gender in policy development and programme planning is a complex undertaking which entails that policy makers and planners do consider women's roles and responsibilities in relation to those of men. Recognizing the impact of societal attitudes on the mainstreaming process, efforts should be made to

better understand how to deal with these attitudes effectively.

3.1 Data base building

A key to the success of mainstreaming women's concerns into water resources and rural development is an adequate data base at the macro and micro levels. This should include data from community profiles particularly on the gender division of labour, access to and control of resources, composition of household income and decision-making about household expenditures and investment. The data base should be improved and made available for policy formulation and for raising awareness of those involved. Attempts should be made to develop good case studies for training purposes.

3.2 Stereotypes

The most detrimental stereotype that policy-makers and planners hold about rural women is that women are best suited for domestic roles and less productive than men in non-domestic activities. Stereotypes cause psychological barriers. Thus, planners and policy-makers did not give sufficient importance to the role of women in rural development, e.g., in the development of water resources, agricultural production, management and marketing. Women who actually believe in the stereotypes will undermine their own development and potentials. These stereotypes must be changed

before we can see significant improvement in rural women.

3.3 Constraints and problems

The most crucial constraints and problems encountered in planning and implementing agricultural, fisheries and rural development programmes and projects are *societal attitudes*. There is no ready-made solution for dealing with societal attitudes. *But it is believed that a proper sensitization on gender issues would help the policy-makers and planners to recognize their biases and find ways to overcome them.*

3.4 Mechanism and strategies

To assist rural women effectively, the most successful planning and implementation mechanism and strategies is to base plans on the realities of women's lives, not simply on the assumptions and generalizations. Planners should use gender-differentiated conceptual framework to acquire and analyze socio-economic data for planning purposes.

Attention should also be given to assessing rural women's needs; conducting effective training programmes for planners and project staff; improving community profile data; providing practical training and increasing opportunities for involvement of the women. Attempts should be made to harness the women's capabilities, motivation and resourcefulness in planning and improving their own lives.

ATTACHMENT 2
BASIC DATA ON POPULATION AND PER CAPITA INCOME,
THE LOWER MEKONG BASIN (1990)

	Population (million)		Per capita GNP (US\$)		GNP of Country million US\$	GNP of Basin million US\$	Shared GNP of Basin %
Cambodia	8.5	7.8	190	200	1615.0	1564	96.8
Lao PDR	4.2	9.9	170	180	714.0	704	98.7
Thailand	56	22.2	1420	568	79520.0	12624	15.9
Viet Nam	68	15.9	202	220	19796.0	9967.5	24.5
Total	196.7	49.3			95585.0	18260	19.1
Average			699	371			

Source:

1. National transport study for the Lao, PDR, SWECO, April 1990

2. United Nations year book

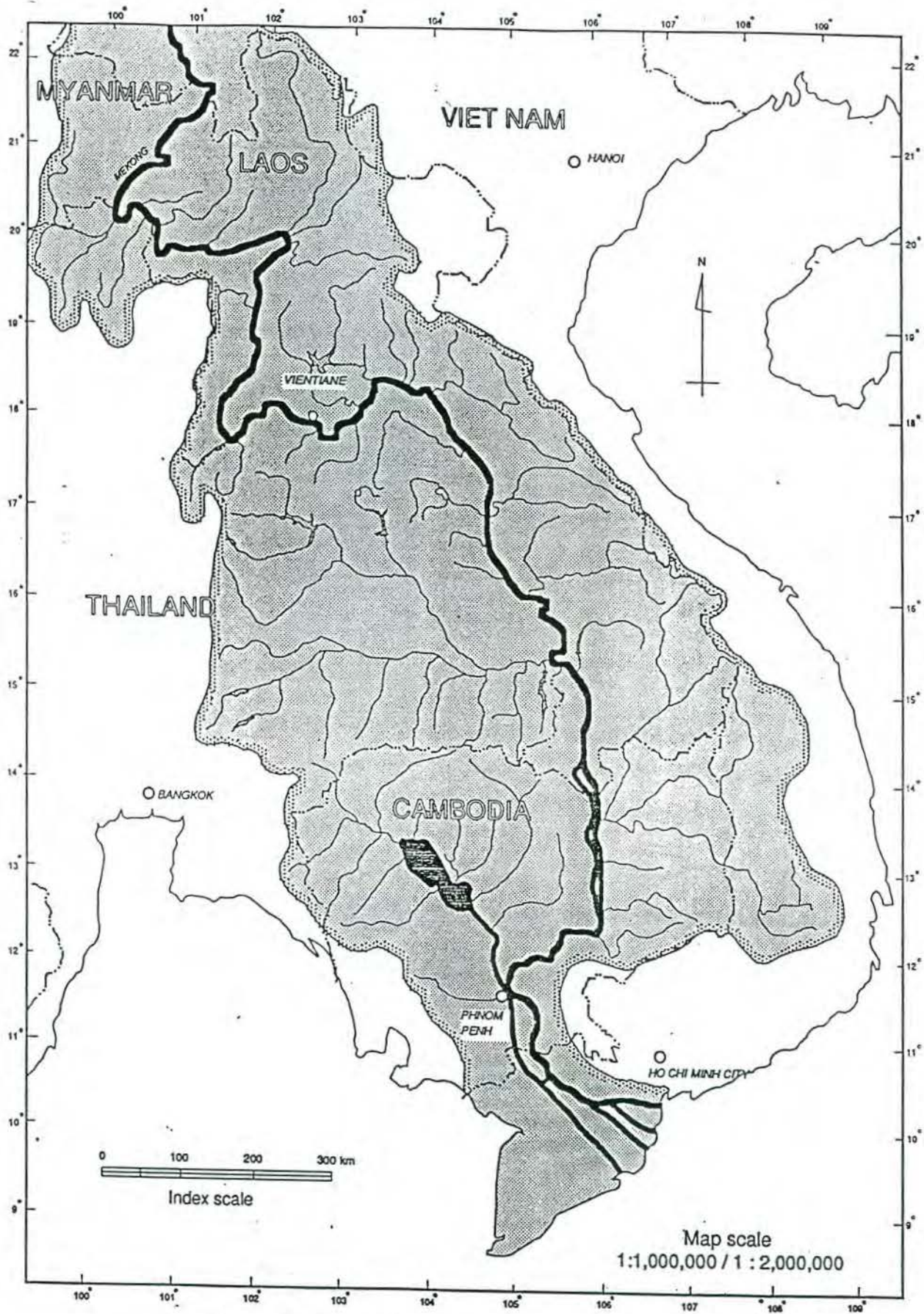
3. Gross regional and provincial product, NESDB, July 1989.

4. ADB report, October 1992

5. Mekong's socio-economic database

6. IBRD world development report 1992, d 219

7. General statistical office, Hanoi, 1992, p. 69.



LOWER MEKONG BASIN
Scale 1:1,000,000