

# **GENDER-RESPONSIVE AQUACULTURE POLICY**

**May 2-3, 2000**

Asian Institute of Technology, Bangkok, Thailand

**Organized by:**

Gender and Development Studies, Asian Institute of Technology, Thailand.  
Institute of Aquaculture, University of Stirling, UK.

**Sponsored by:**

Department for International Development (DFID), UK  
Asia-Pacific Economic Cooperation (APEC), Singapore

## ***Background***

### *Women in Aquaculture study*

The DFID-funded regional workshop on Gender-Responsive Aquaculture Policy emerged from a research study on 'Women in Aquaculture' (FWG 03/99) funded by the Asia-Pacific Economic Co-operation (APEC) and conducted in six countries in Southeast and East Asia: Indonesia, Malaysia, Philippines, Thailand, Vietnam and China. The aims and objectives of this study, as defined in the research brief, included:

- To identify key issues relating to the role of women in aquaculture in developing economies and identify methods to develop education, training and extension strategies.
- To propose strategies that will allow APEC Fisheries Working Group and Economies to decide how best to promote and contribute to the involvement of women in aquaculture.

The research team for the six studies included: Dr Govind Kelkar and Dr Kyoko Kusakabe from AIT/Gender and Development Studies and Ms Cecile Brugere and Ms Malene Felsing from the Institute of Aquaculture, University of Stirling. The first two researchers did field observations and studies in China, Vietnam and Thailand; and the latter two did their field studies in Indonesia, Malaysia and the Philippines.

### *DFID Sustainable Livelihoods (SL) framework*

"A livelihood comprises the capabilities, assets and activities required for a living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future without undermining the natural resource base" (DFID 1999)<sup>1</sup>.

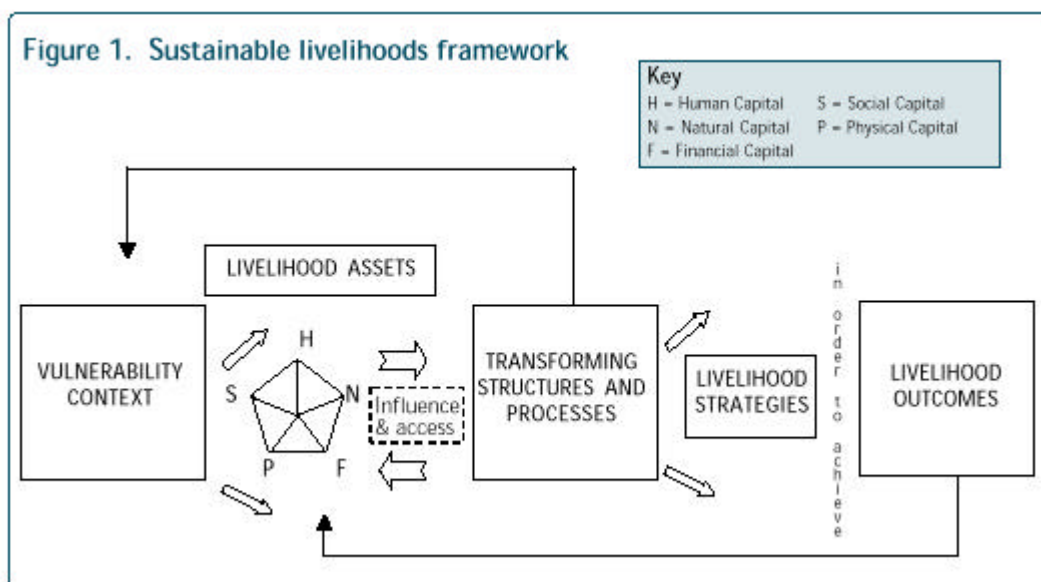
To operationalise the concept of "sustainable livelihoods", the UK Department for International Development has developed a framework to understand and analyse the livelihoods of the poor (Figure 1). The understanding of the poor's assets, in terms of human, natural, physical, financial and social capitals, and strategies to cope with external factors such as shocks, trends and seasonality (i.e. vulnerability context) and institutional, commercial and cultural structures and processes, can provide avenues to target development strategies more adequately to the poor and support them to achieve new livelihood outcomes. DFID's sustainable livelihood (SL) framework is an evolutionary (Ashley & Carney 1999)<sup>2</sup> and analytical tool to improve our understanding of the complexity of livelihoods while assisting in the identification of suitable 'entry points' for external support that are congruent with vulnerable people's survival strategies and priorities (Farrington, Carney, Ahsley & Turton 1999)<sup>3</sup>.

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<sup>1</sup> DFID (1999) *Sustainable Livelihoods Guidance Sheets*. Department for International Development, London.

<sup>2</sup> Ashley, C. & Carney, C. (1999) *Sustainable Livelihoods: Lessons from an early experience*. Department for International Development, London.

<sup>3</sup> Farrington, J., Carney, D., Ashley, C. & Turton, C. (1999) *Sustainable Livelihoods in Practice: Early applications of concepts in rural areas*. Natural Resource Perspectives, No. 42, June 1999. ODI, DFID, London.



There is no single and well-defined 'approach' to SL; the SL framework is just one of them, along with a range of other tools such as stakeholder analysis, social analysis, institutional analysis and various forms of cost-benefit analysis (Ashley & Carney 1999). All these methods are used complementarily and the underlying principles to SL approaches are respected, namely:

- people-centered: bottom-up approach focusing on people's needs,
  - responsive and participatory: the poor themselves identify their livelihood priorities,
  - multi-level: emphasis on micro-macro links,
  - conducted in partnership, with both public and private sectors,
  - sustainable: environmentally, economically, institutionally and socially,
  - dynamic: recognition of the dynamic and adaptive nature of livelihood strategies.
- (based on Ashley & Carney 1999).

#### *Gender-sensitive livelihood strengthening through aquaculture development*

The "Women in Aquaculture" research study focused on gender issues in aquaculture. The workshop looked at the constraints to women in aquaculture from a double perspective: women's involvement in aquaculture for the improvement of their livelihoods and the strengthening of their capabilities.

Issues common to the fields of aquaculture and gender and development studies, such as:

- i. How, and in what capacity, do women participate in aquaculture and how can aquaculture benefit women?
- ii. Women's participation is important for aquaculture development, but is aquaculture important for women's advancement?

were discussed during the workshop while questions related to the use the SL framework in capturing and mainstreaming gender issues in aquaculture development were raised.

## *The workshop*

Workshop participants were mainly from the six target countries in Asia, but with the support of the Network of Aquaculture Centers in Asia (NACA), extra participants from India, Nepal, Cambodia, and Sri Lanka were allowed to attend. A representant from Bangladesh also contributed to the workshop thanks to the support of CARE-Bangladesh.

The workshop was facilitated by the Institute of Aquaculture (Cecile Brugere and Lindsay Pollock) and the Gender and Development Program of the Asian Institute of Technology (Dr. Kyoko Kusakabe and Dr. Govind Kelkar).

### **Objectives of the workshop**

- To review existing aquaculture policies from a gender perspective and gender interactions within the Sustainable Livelihoods framework
- To formulate recommendations for gender-responsive policies and strategies that will facilitate the advancement of women through their involvement in aquaculture.

In view of these objectives, current aquaculture policies were reviewed and assessed, avenues for change identified and strategies for women's empowerment through aquaculture put forward.

### **Workshop schedule**

#### **Tuesday 2 May 2000**

9:00-9:30	Opening Introduction to the workshop Self-introduction and Photo session
9:30-10:15	Country presentation on policies on aquaculture development and gender equality concerns.  <b>Vietnam</b> Dr. Tran Thi Dzung, Senior Coordinator of National Network for Women in Fisheries, Ministry of Fisheries.  <b>Thailand</b> Ms. Jirawan Yamprayoon, Senior Food Technologist, Department of Fisheries, and Ms. Ubolratana Suntornratana, Fishery biologist, Udonrthani Inland Fisheries Development Center, Department of Fisheries
10:15-10:45	<b>Philippines</b> Ms. Didi Baticados, Researcher, SEADEC/AQD Aquaculture Department Coffee Break

10:45-11:30 Continue with country presentation on policies on aquaculture development and gender equality concerns.

**Malaysia**  
Mr. Ismail Abu Hassan, Head of aquaculture, Department of fisheries

**Indonesia**  
Ms. Rina Eloksatiti Hadirini, Chief, Brakish culture guidance section, Directorate of Fisheries.

**China**  
Mr. Gan Kuyun, Deputy director, Department of agriculture, Yunnan province.

11:30-12:00 Discussion on presentations

12:00-1:00 Lunch

1:00-1:30 Gender concerns in aquaculture: Strengthening of women's capabilities  
by Dr. Govind Kelkar, Gender and Development Studies, AIT.

The use of sustainable livelihood framework of DFID in aquaculture development  
by Ms. Lindsay Pollock, Institute of Aquaculture, University of Stirling, UK.

1:30-3:00 **Group discussion:**  
Gender concerns and strengthening of women's capabilities in aquaculture.

3:00-3:30 Coffee break

3:30-5:00 Plenary presentation

7:00- Reception dinner

**Wednesday 3 May 2000**

8:30-8:45 Re-cap of issues raised in day 1.

8:45 - 9:45 Case studies on women's participation in aquaculture.

**Vietnam**  
Ms. Tran Thi Anh Thu, Research Institute for Aquaculture No.1.

**Malaysia**

Ms. Thalathiah Saidin, President, Malaysian Fisheries Society.

**China**

Mr. Xiao Yan, Coordinator, Aquaculture department, Lijian County Hydro-electricity Bureau.

**Cambodia**

Ms. Kong Thida, Extension officer, SCALE integrated aquaculture programme, Southeast Asia Outreach.

9:45-10:15

Coffee break

10:15-11:30

Case study presentations on women's participation in aquaculture.

**Bangladesh**

Mr. Benoy Kumar Burman, Ph.D. Candidate, AIT, Thailand.

**India**

Dr. Krishna Srinath, Information and Statistics Division, Central Institute of Fisheries Technology

**Sri Lanka**

Ms. Pushpalatha, Aquaculturist, Regional Aquaculture Extension Centre

**Thailand**

Dr. Kyoko Kusakabe, Gender and Development Studies, AIT, Thailand (based on a case study from the "Women in Aquaculture" Project).

**Indonesia**

Ms. Cecile Brugere, Institute of Aquaculture, University of Stirling, UK (based on a case study from the "Women in Aquaculture" Project).

11:30-1:00

Lunch

1:00-1:30

Summing up: Linkages between policies and practice.

1:30-3:00

**Group discussion:** Future strategies for policy and action.

3:00-3:30

Coffee break

3:30-5:00

Plenary presentations and operational guidelines  
Synthesis and Closing

The list of participants and their contact details are provided in appendix.

## ***Synthesis of aquaculture development policies in South and Southeast Asia***

### *Aquaculture development*

Policies on aquaculture development were presented by representatives of Vietnam, Thailand, Philippines, Malaysia, Indonesia, China (Yunnan Province) and India. It was acknowledged that aquaculture was becoming an increasingly important component in the economies of all six countries and is used to meet the increasing demand for fish and other aquatic products on both domestic and export markets. Aquaculture is also used as a means of mitigating the decreasing income from declining fisheries.

In all target countries represented at the workshop, current aquaculture development policies focus predominantly on increasing aquatic production. The development of aquaculture production in order to contribute to food security was also addressed in national aquaculture development policies. If the 'poverty focus' of these policies is not always explicit, these two aspects can be directly related to livelihood enhancement by providing a source of low cost protein for rural communities and generate additional income and employment.

### *Gender concerns in aquaculture development*

However, no policies specifically related to the involvement of women in aquaculture. Although their contribution to the activity is evident, no data exists, nor is collected on women's participation to aquaculture production. A paradigm shift in policy is therefore needed to ensure the effective participation of women in aquaculture.

## ***Gender concerns in aquaculture: strengthening of women's capabilities***

Gender issues in aquaculture can be seen from two perspectives. One is an instrumental perspective. The other is an empowerment perspective. Instrumental perspective sees women as a vital force in aquaculture development, and focuses on the need to assist women so that they can be more involved and more effective in aquaculture activities. From this viewpoint, women's consolidation of primary capabilities and access to credit, training and extension services are important, so that they are able to improve their skills and knowledge and are enabled to increase yields.

It has been increasingly recognized that improving women's situation cannot be achieved without their empowerment, that is, with a change in gender power relations in the household and in the society. The goal of the empowerment perspective is to challenge the existing gender relations. This can be achieved through development projects, including aquaculture activities. Therefore, from this perspective, it is important to examine whether more equal relationships between genders have been achieved through the uptake of aquaculture by women, whether their choices regarding the management of the activity and the household

have increased, and whether women's self-esteem and self-confidence have improved so that they can be in charge of their own lives. Women able to access knowledge and information, to make decisions on household investment and expenditure, as well as having decision making power in the community, are some of the indicators to judge advances in their empowerment.

Empowerment perspective and the instrumental perspective do not exclude each other. On the contrary, they complement each other. Women enabled to participate in aquaculture activities will be in a better position to take part in decision making processes. Women who can make decisions can be in a better position to be *in charge of* aquaculture activities, and thus be more effective in managing their aquaculture activities. On the other hand, if women work on aquaculture activities more and consequently increase their income, but if there is not questioning nor challenging of existing gender relations, women's empowerment process will be hampered. In this instance, aquaculture presents the risk of burdening women with additional cheap and unrecognized labor, without providing them with a fair distribution of benefits.

In the course of the "Women in Aquaculture" project FWG 03/99, and through the presentation of policies and case studies, it was found that women's participation in aquaculture was recognized by many researchers and practitioners, but largely from an instrumental perspective. In rural Asia, women are excluded from participation in community-level management of natural and other resources, from relations with external agencies and from political representation. Exclusion of women from management functions has a double effect. First it does not allow the strengthening of a community's capabilities. Second, it ignores an important portion of social knowledge and thus leads to inefficiency in resource use and retards the overall development of the community's social capital.

### ***Gender issues in the Sustainable Livelihood Framework***

As mentioned previously, the SL framework provides links between the technical, social, institutional elements composing people's livelihoods and leading to the achievement of livelihood strategies. The "Sustainable Livelihood Framework" was introduced to the participants and used in the group discussions on gender concerns in aquaculture.

Gender issues are implicit throughout all components of the framework. In addition, power relationships among gender, class, age, and ethnicity are included in the processes ('Transforming structures and processes') which determine the way in which structures and individuals operate and interact. One problem however lies in the fact that the SL framework is used at the household or community level. Capturing the invisible issue of decision-making between men and women, either within one's household or a specific community, will remain difficult if the analysis of these units is not disaggregated between genders. Decision-making is an important part of the livelihood enhancement process which is to be fairly and equally shared between men and women. For example, even though women perform a major part of the labor, decisions with regard to purchases and use of their earnings still rests with men. In a free decision-making world, women's livelihood strategies would probably be different

from men's and from those imposed on them by the household head, cultural, technical and institutional constraints.

There is not a single 'approach' to sustainable livelihoods. The use of the SL framework, as one of the SL approaches, would therefore benefit from being used simultaneously with the gender relations approach, in particular in monitoring phases of projects, to highlight women's status improvement in the home or community following a change or readjustment in their livelihood strategies. The ability to carry out this type of combined analysis therefore requires the researcher/extension worker etc. to have a strong gender awareness in order to be able to expose gender relations as part of the livelihoods framework.

Part of the SL framework which fell under particular scrutiny was the 'livelihood asset pentagon', composed of natural, physical, human, financial and social 'capitals' (or 'livelihood building assets'). A way to increase the gender-sensitiveness of the five capitals was to break down each of the five 'corners' of the pentagon into smaller polygons which would reflect issues encountered in each capital. For example, natural capital could be divided into 'land' and 'water' (in the context of aquaculture). A woman's access to and control over land may be restricted due to heredity laws, while the pond in her backyard is readily accessible and managed by her. Separate pentagons and sub-polygons could be drawn for men and women separately, even at the household level. This would allow to move away from too crude generalisations and capture gender specificities, as well as identify where policy interventions are needed.

### *Cross-country analysis of women in aquaculture*

A cross-country analysis of women and aquaculture provided by the case-study presentations and supported by findings from the Women in Aquaculture study showed the following:

- Women are engaged in various aquaculture activities, e.g. from hatching to harvesting and marketing.
- Their participation ranges from 33 percent of the rural aquaculture work force (in China) to 42 to 80 percent of the workforce in fresh water and cage culture (in Indonesia and Vietnam). But they are not represented in any decision-making/policy making bodies.
- Women tend to participate in low-skilled and low-paid jobs. A crude description will be 'women are the workers and men are the managers,' both in the family and in the community.
- Women have marginal access to extension, training and new technologies (4 to 19 percent of the attendance).
- Women, by and large, are excluded from local decision-making and control over resources, e.g. ponds, land, water, knowledge, management, information skills.
- The combination of the above factors with women's restricted mobility and access to credit facilities makes women's participation and involvement in small-scale, backyard aquaculture activities more important than in large-scale commercialised aquaculture operations.

- Women’s exclusion from decision-making and extension is largely justified on grounds of given and unquestioned norms.
- There is inadequate data available on women’s role in aquaculture. While field visits showed that women are substantially involved in aquaculture at every point of the production process, the absence of sex-segregated data reinforces the invisibility of women as producers and contributors to the economy.

### ***Linkages between Policy and Practice***

A gender-responsive aquaculture policy and its effective implementation require therefore a two-fold approach:

- Women’s substantial participation (50 percent, which corresponds to their number in the population) in all levels of decision-making related to aquaculture; and
- A gender relations approach to assess if projects have improved women’s socio-economic and political position in their homes and communities.

A gender relations approach requires a gender sharing of the work (including housework which is officially considered as non-work) and decision-making both in the household and community. The SL framework can assist in the monitoring and evaluation of policy impacts on livelihood strategies adopted at the household or community level while the gender relations approach would check the invisibility of women’s contributions, and ensure that women are not sacrificed for the interests of their family and community for aquaculture development.

### ***Future strategies for policy and action***

#### **Policy Making**

There is a need to formulate a new kind of policy making for aquaculture. The top-down centralized approach needs to be replaced by a bottom-up development approach using groups of experts working in the field. These experts have the responsibility to make sure that a project is formulated after conducting a gender sensitive Participatory Rural Appraisal (PRA) or Rapid Rural Appraisal (RRA) and a gender analysis in the field. Instead of only involving women and increasing their workload, aquaculture policies should ensure that their socio-economic status also changes for the better both within the household and the community.

#### ***Capability Equality through Public Policy***

The central goal of public policy and planning is capability equality, to achieve basic individual capability – particularly in its application to the assessment of women’s quality of life and through an integrated program of skill development, management skills, knowledge-enabled technological development, social mobility, and decision-making for women. A number of women in agriculture and aquaculture at the grassroots level voice a demand for their own economic and social independence, seek knowledge, information and formal

education. This shows that they aspire to capabilities and personal freedom from the patriarchal, male family authorities as guardians of the village community.

#### *Addressing cultural sensitivity in gender inequality*

Addressing the complexity of gender subordination in various socio-cultural systems means challenging 'cultural sensitivity' in terms of gender inequality. Lack of intervention in gender matters is often justified in terms of 'cultural sensitivity,' even where equally alien programs are being promoted in areas, for example, of caste, class, indigenous/ethnicity, environment and population control.

Patriarchal development brings with it, as patriarchy in general, more than an epistemic subjection of women. It legitimates women's subordination as culturally given and escapes all criticism of their domination.

#### **Training and Extension**

- Paradigm shift attributing more prestige and funds to extension workers.
- Sensitisation of policy makers to gender issues in aquaculture.
- Gender needs assessment to be conducted in current extension practices.
- Implementation of new gender sensitive extension practices to be conducted by extension staff.

Strengthening gender sensitive extension at the grass-root level is a key area in the successful implementation of more gender-sensitive approaches in aquaculture. A paradigm shift is necessary whereby the extension worker is viewed as a researcher. This requires budget and resource allocations and a more incentive structure. This can assist in attracting more women into extension rather than research. It is widely acknowledged that women are under-represented in extension and training in most countries and that there is a perception that research is more prestigious than extension work. Adding prestige to training and extension is an avenue to encourage the participation of women in this field.

The sensitisation of policy makers to gender issues will be instrumental to the success of gender sensitive approaches to training and extension, since they would involve policy modification or formation at some juncture in the future. This could be achieved by raising the profile of gender issues within policy-making bodies by ensuring that policy makers attend training courses and conferences.

In order to meet the needs of women, a gender needs assessment should be carried out from the outset. This requires a critical analysis of the extension system to assess if the needs of women are currently met by existing extension practices. A multi-disciplinary research body including extension workers should be established to conduct this assessment, deriving funds from either national or international sources. A combination of technical, socio-economic and gender backgrounds would be best suited for this study. The outputs of this assessment would be submitted to policy makers. The extent to which the needs of women are being met or

ignored under the current extension procedures would be highlighted. Implementation, monitoring and evaluation of gender sensitive approaches in aquaculture should be conducted by this multi-disciplinary body and data collected should be gender disaggregated.

### **Technology Development and Research**

- Gender needs assessment to precede aquaculture research interventions.
- Policy formulation to support these methods.
- Evaluation of gender sensitivity of technology in relation to 1. Women's mobility, 2. Safety, 3. User-friendliness of the technology.

Technology and research projects should be gender sensitive in their inception, implementation, monitoring and evaluation. These should be preceded by a gender needs assessment and stakeholder analysis to determine the social impacts and beneficiaries of any intervention.

In order to effectively implement and institutionalize these measures, policy should be formulated by a donor institution or government department and implemented by a designated body.

The impacts of new technologies to be transferred at the grass-root level should be assessed with respect to women's usage and data collected to monitor the uptake of the technology must be gender disaggregated to reflect this. Appropriate technologies should be selected, in particular reference to the capabilities of women users: mobility required for using the technology, the safety of using the technology (e.g. ability to swimming) and its user-friendliness (e.g. light equipment adapted to women's strength). Efforts should be made to increase mobility of women by organizing study, mutual learning visits.

### **Gender Disaggregated Database**

- Need to start separate data for men and women.
- Need to increase awareness amongst women themselves on the value of their own contribution to aquaculture and the potential benefits they could draw from it.

There is a complete absence of gender disaggregated data with regard to aquaculture and there is an urgent need to fill this gap.

Women's contribution to aquaculture is often more than that of men in their households. There is a need to increase awareness of their contribution amongst women themselves. Evidence of women's substantial involvement in the field will add weight to the efforts to bring about gender-sensitive changes in policy or in formulation of gender-sensitive policy.

### **Resource Provision**

- Credit to be assessed on the basis of access to collateral rather than ownership of collateral.
- Provision of group credit.
- Results of monitoring exercises to be utilised to improve attractiveness of aquaculture to banks.
- Subsidies for systems where women have a comparative advantage.
- Niche exploitation by women.
- Strengthening capabilities of women's unions and organisations through resource allocation and assisting them the role of carrying out mainstream responsibilities.

Resource provision in aquaculture, particularly of credit often discriminates against women, who are often not the legal owners of the resources to which they have access. The provision of credit and other resources in aquaculture should be based on *access to* rather than ownership of collateral, promoting equality in access to credit and women's independent right to resources e.g. land, ponds, lakes and other resources.

Provision of group credit, based on production plans and careful gender needs and opportunities assessment, should be considered by financial institutions. However, this may be suitable only for small-scale aquaculture such as backyard ponds and fry production.

The results of trial-based monitoring should be utilized to improve the attractiveness of non-subsistence aquaculture systems to banks. Subsidy should also be provided for aquaculture systems where women have a comparative advantage. Ditches and inshore areas, which are often neglected by men, can be used by women, thus avoiding conflicts over resource use. Their safety is not compromised in these areas. Community ponds represent a water resource to which women have access, however competition for the use of water in these ponds may restrict the ability of women to be involved in aquaculture in these areas. Women should be encouraged to participate in other non-land based, aquaculture related activities such as ornamental fish production, hapa sewing, seed production and the collection and processing of feed and aquatic products.

Emphasis should be placed on strengthening capacities of women's unions and organizations through resource allocation and assigning them the role of carrying out mainstream responsibilities, such as management of energy, water resources, etc.

## ***Conclusion***

The above strategies for policy and action can be traced in the 'transforming structures and processes' component of the SL framework. The incorporation of these in current national aquaculture development policies and their implementation at various levels of society (government, community, household) should influence the build up of women's livelihood

assets (5-capital pentagon) while improving simultaneously their livelihood outcomes and the control they have over these, and their capabilities within the household and the community. If these measures are implemented and monitored, aquaculture could be considered as a suitable entry point for women's livelihoods and capability improvement.

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