

## DESCRIPTION OF THE CURRENT STRIPPED CATFISH (*Pangasianodon hypophthalmus*) VALUE CHAIN IN THE MEKONG, VIETNAM

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### INTRODUCTION

Aquaculture has a great potential to develop in the Mekong Delta, Vietnam with more than 1.3 million ha of water surface which could be used for aquaculture development. The striped catfish (*Pangasianodon hypophthalmus*) farming system in the Mekong Delta is one of the largest freshwater aquaculture industries in the world with most of its production destined for export, much of it to the EU. In 2009, the catfish production reached around 1 million tones (fig. 2), and the exported value was 1.342 billion USD. Striped catfish contributed 32% of total fisheries export value, and it has essentially become an important species of the aquaculture sector for export. However, the current farming system needs to be improved on many fronts, and issues of environmental integrity need to be addressed to ensure the industry continues to develop in a sustainable manner. Issues impacting the viability and development of catfish farming in the Mekong Delta include poor husbandry practices; low quality seed; excessive dependence on trash fish as a feed resource; small scale (fig. 1); inadequate planning in site selection; food safety and market access; and environmental degradation.

This study describes the current value chain of the striped catfish system in the Mekong Delta, Vietnam. The main objective was to determine value chain actors related to the catfish production and market systems. The findings will contribute basic data and information for seeking a sustainable growth in the long run.

### METHODS

The survey was carried out at six provinces, of which An Giang, Can Tho, Dong Thap and Vinh Long are considered the most important areas of Vietnam in traditional models of production, and Ben Tre and Soc Trang provinces, which are new development areas in the coastal zone (fig. 2 & 3). The primary data was collected through structured checklists and open questionnaires, stakeholder's visits, and interviews. Specifically, a total of 55 grow-out, 25 hatcheries, 25 nurseries farms, 6 seed traders, 6 fisheries processing plants, 15 input suppliers, 5 feed-chemical companies and other stakeholders or other stakeholders were examined. The surveyed farms were randomly chosen using a sample-frame developed from data provided by the respective administrations (fig. 1), and other stakeholders (labor groups for pond preparation or harvesting, chemical/drug shops, by-product traders, by-product processors, transportation services etc.), which were also surveyed randomly in the same areas. The value chain analysis focused not only on direct actors involved in the value chain, but also on the indirect facilitators. The 'chain map' outlines the actors and processes of the current striped catfish value chain; for each link of chain it shows central activities and the respective actors who perform these activities.

### RESULTS

There are many types of stakeholders who are involved directly and indirectly in catfish production and market systems, from production to consumption both at the domestic market and at the export market (fig. 4). The value chain map shows that many actors participate in both primary activities and support activities. The primary actors who are directly involved in the transformation of inputs into outputs include seed suppliers (hatcheries, nurseries, seed traders); grow-out farmers (individual-, contracted-, and company's farmers); export agents; local traders; and processing/export firms. The supporting actors who facilitate the activities of the primary actors include feed/chemical and drug suppliers; service providers; input suppliers; and support institutions/facilitators.



Results showed that the grow-out farms, catfish processors, and feed producers play an important role in the value chain of catfish system, while the rest provide support services during production, harvesting, processing, distribution, and export steps. The results also indicated linkages among stakeholders; specifically the links between farmers and processors are weak, thus the product competition on the market has decreased. An appropriate management measure, therefore, has been required to ensure catfish systems continue to develop in a sustainable manner. Strengthening of value chain linkages should be considered as a main priority activity in the next steps.

### DISCUSSION

The linkage between farmers and processors has more commonly been verbal agreements than enforceable contracts. Therefore, the fish farmers have faced problems in meeting the demand of potential customers and finding buyers for their production in the first place. The demand in terms of quantity and quality are determined by the processors, which places them in a powerful position in their relationship with the fish farmers.

### IMPACT STATEMENT

The primary findings will contribute basic data and information on value chain of striped catfish in the Mekong Delta to address the main actors and sustainability indicators being concerned in the follow-on research; to improve trade linkages among actors of value chain; and to development of an ethical aquatic food index (EAFI).

### ACKNOWLEDGEMENTS

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Fig. 1 DISTRIBUTION OF CATFISH FARMS AND AREA BY FARM SIZE IN THE MEKONG DELTA, VIETNAM IN 2009

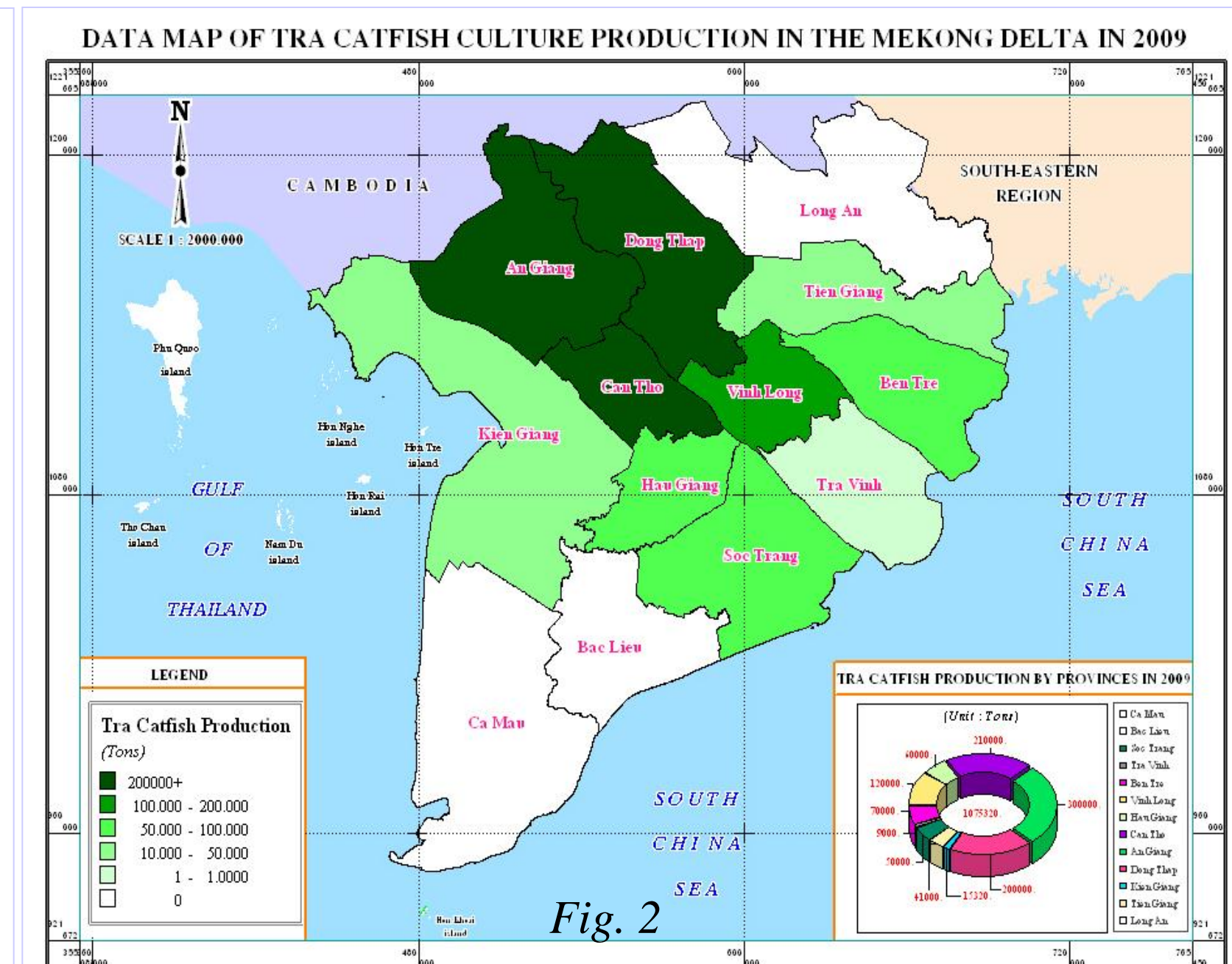
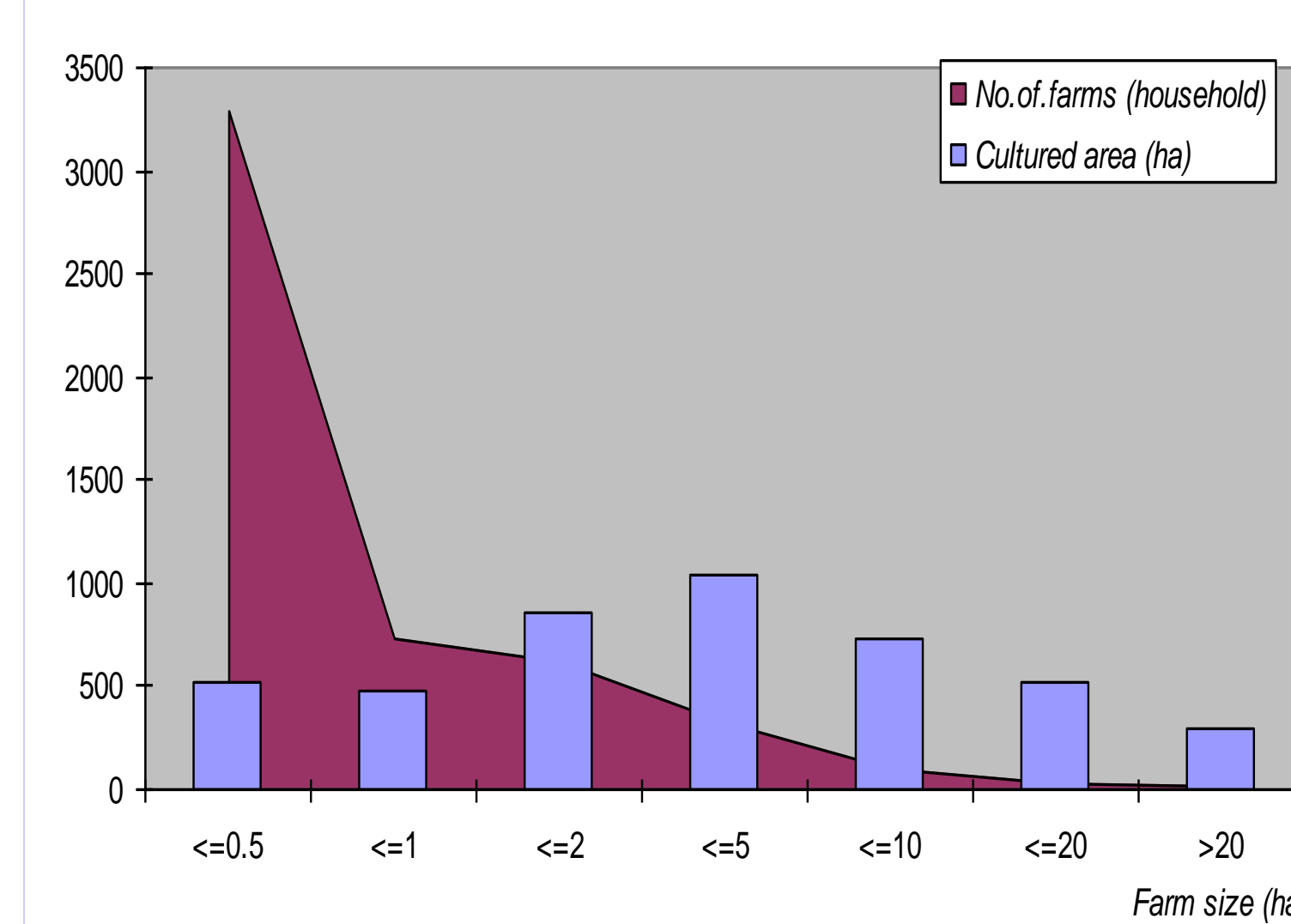


Fig. 3 SURVEYED SITES OF THE STRIPPED CATFISH FARMING AREAS IN THE MEKONG DELTA, VIETNAM

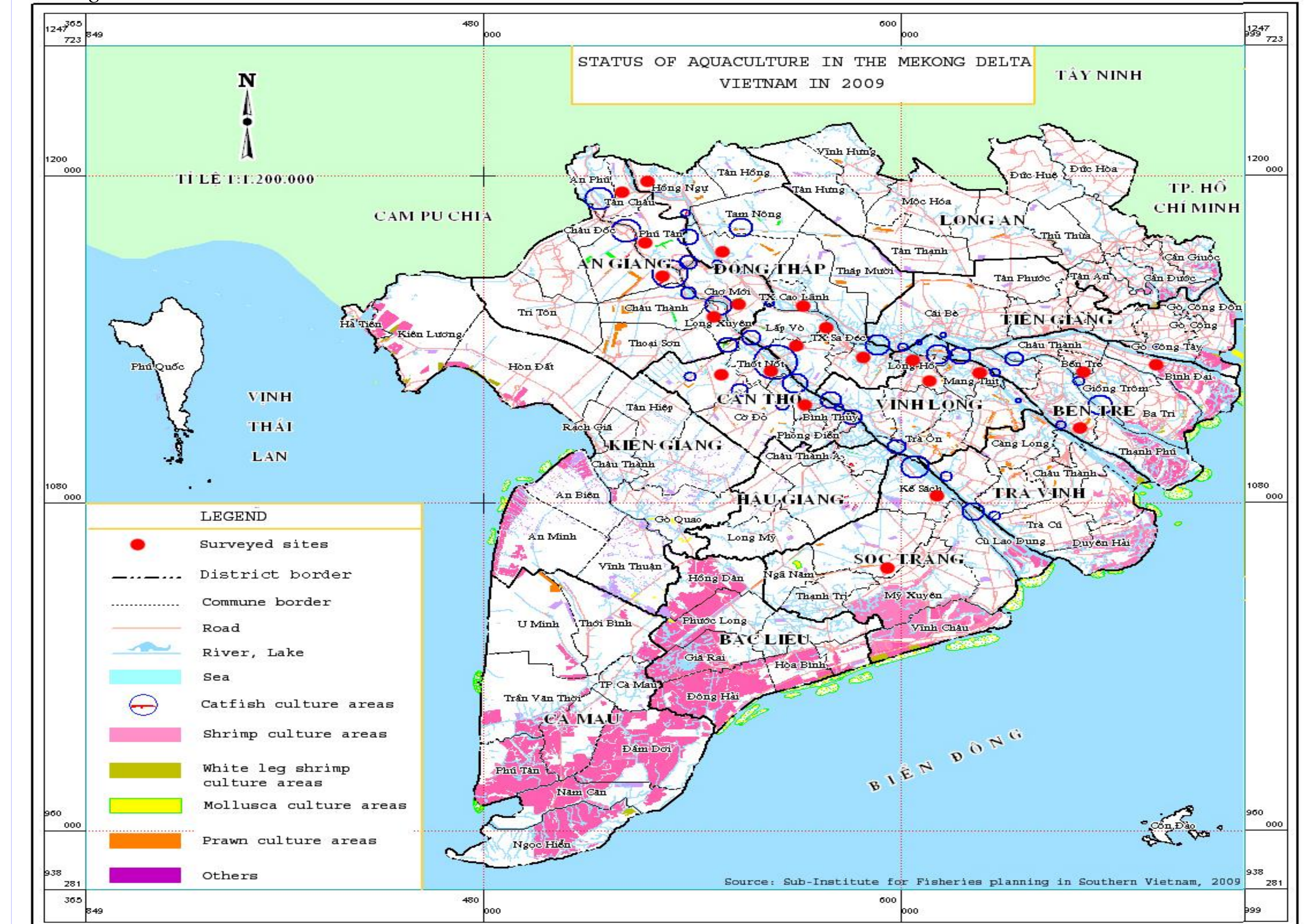


Fig. 4 THE STRIPPED CATFISH VALUE CHAIN IN THE MEKONG DELTA, VIETNAM

