

Thailand Nile Tilapia Production

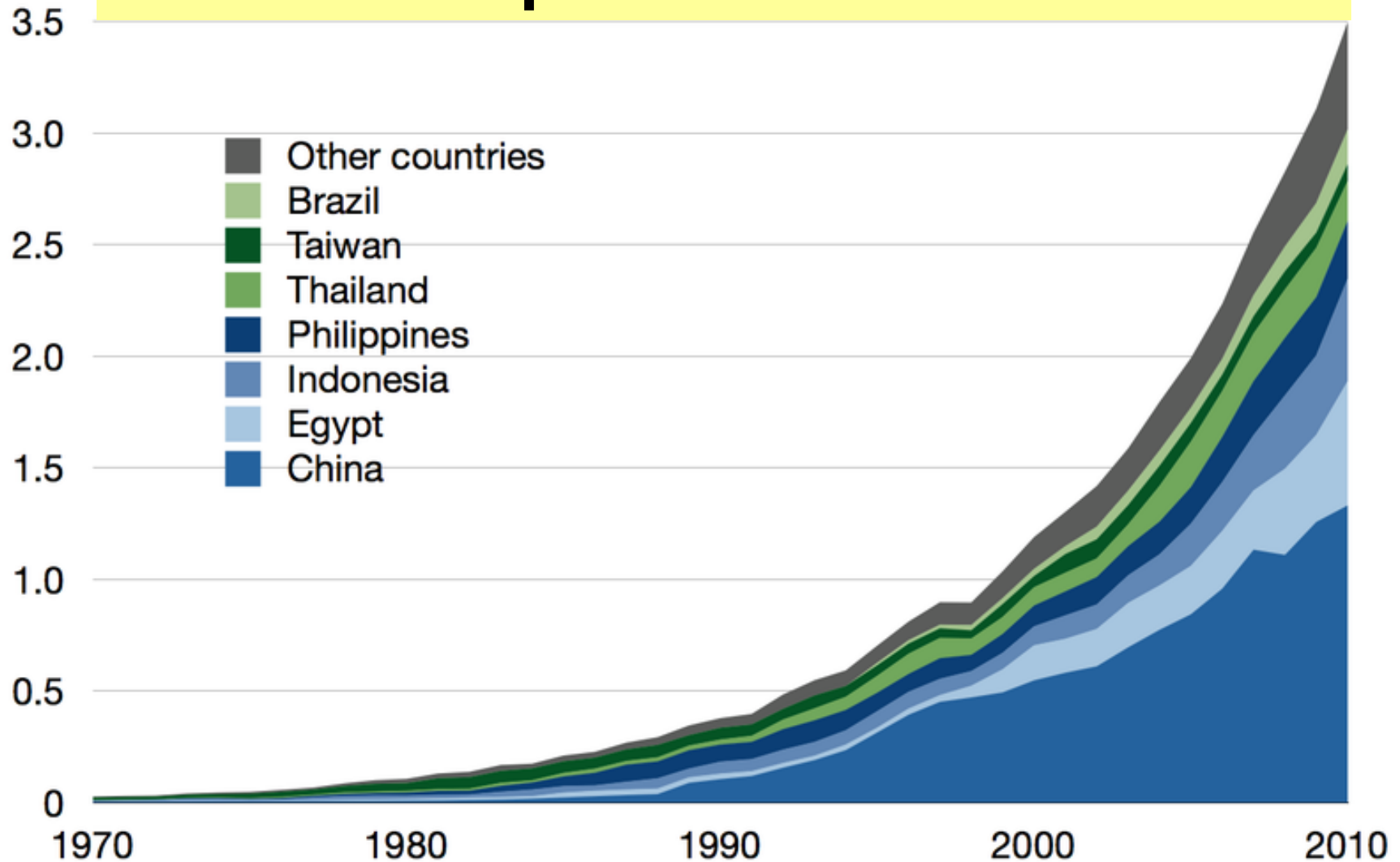
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1. Introduction

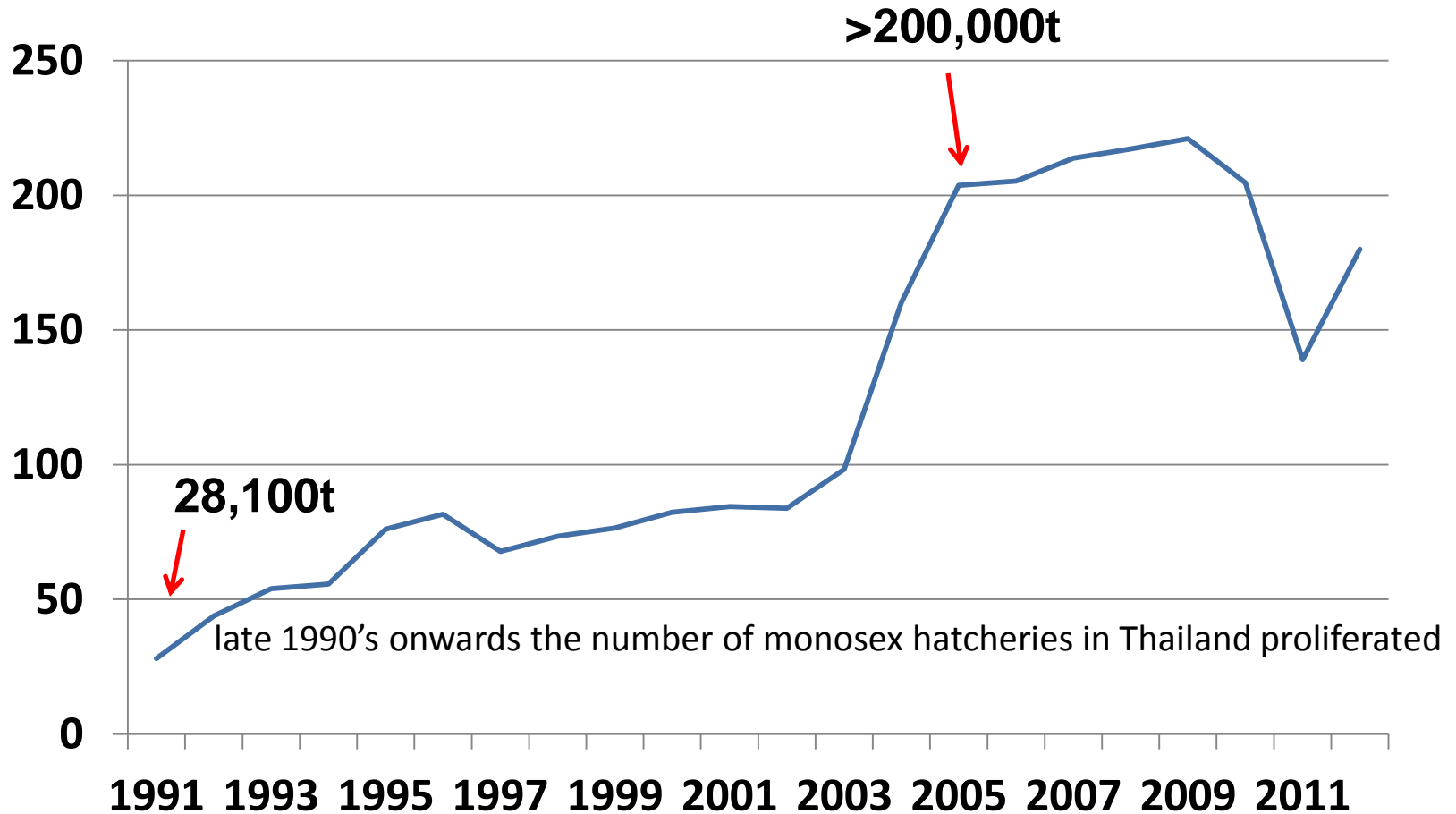
- Currently, the aquaculture of Nile-Tilapia has expanded throughout the country, and, become the No. 1 freshwater-fish produce in Thailand with a volume of more than 200,000 tons per year since 2005.
- This creates various kinds of jobs and professional careers through the cycles of fish nurseries, fish food manufacturers, fish farmers, production suppliers, fishermen, freezing storage, and market traders.

1.1 World production contribution



Aquaculture production of tilapia by country in million tonnes as reported by the [FAO](#), 1950–2009

1.2 Production development

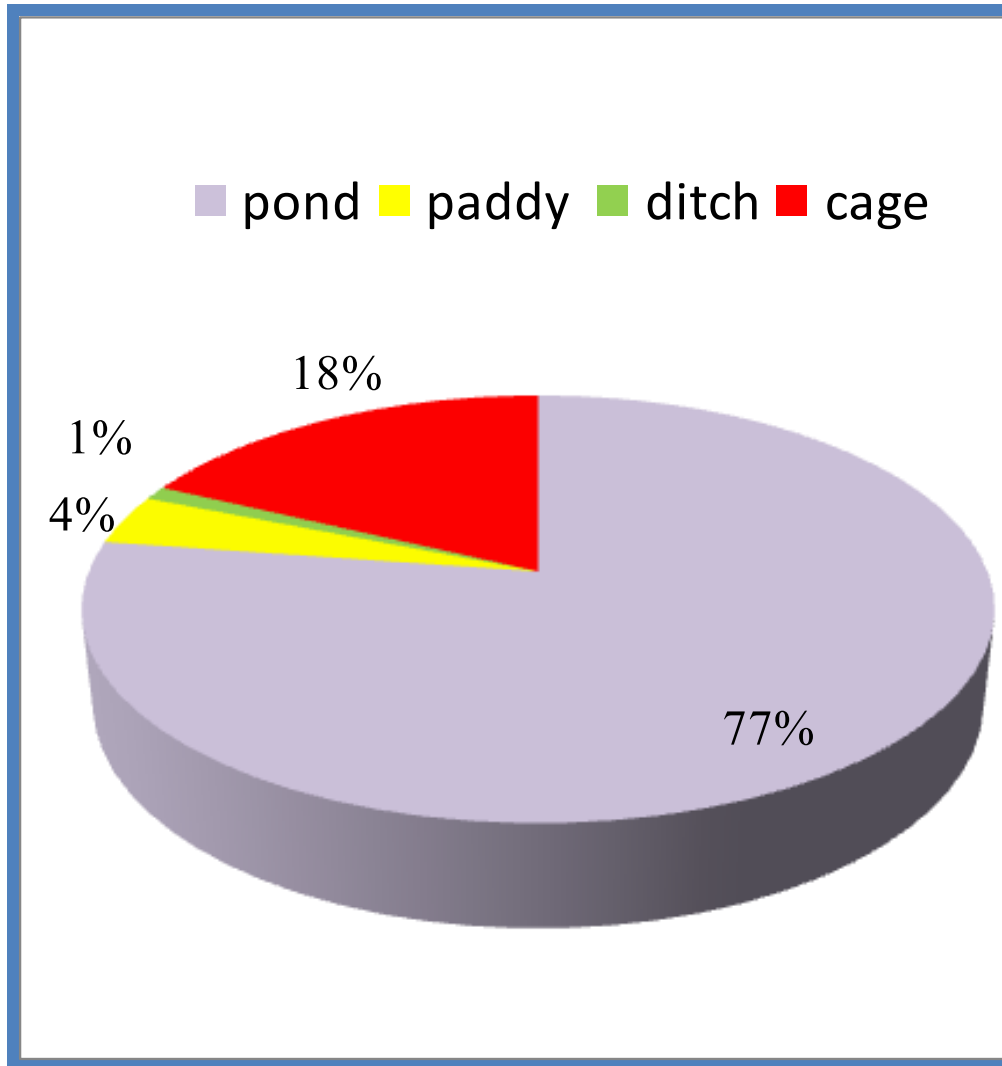


1.3 General profile (2010)

Production 204,680 ton
Number of farm 330,557 farms
Area 92,210 ha

items	pond	paddy	ditch	cage
No. farm	318,820 (96.4%)	1,683 (0.5%)	4,014 (1.2%)	6,040 (1.8%)
Area (ha)	87,664 (95%)	2,638 (2.9%)	1,829 (2.0%)	97 (0.1%)
Prod. (ton)	158,293 (77.3%)	7,756 (3.8%)	2,137 (1.0%)	36,494 (17.8%)

Production by types of culture



• Pond	158,293 ton
• Paddy	7,756 ton
• Ditch	2,137 ton
• Cage	36,494 ton
❖ Total	204,680 ton

(source: Fisheries Statistic
2010)

**Pond is the most significant
production culture types,
followed by cage culture.**





Total production in
2010 was 204,680 ton

	ton	%
North	41,313	20.2
Northeast	57,307	27.9
Central	93,735	45.8
South	12,324	6.0

2. Nile tilapia culture development

2.1 The history



- 1965-first introduced into the country
- 1966-His Majesty the King graciously delivered the number of 10,000 fingerlings (3-5 cm) to Fisheries Director General to culture and breed at 16 Fisheries Stations across the country.
- The name “Pla Nin” was graciously given by the king.

2.2 Strain

- Nile tilapia (*Oreochromis niloticus*) is the main cultured species in Thailand.
- The popularity of the culture species is a result of genetic improvement in addition to its special traits.

***O. nilotica* - Chitralada 3**

- Chitralada 3 strain was developed by Aquatic Animal Research and Development Institute.
- Its origin is GIFT (Genetic Improvement Farm Tilapia) which has been developed from Chitralada strain and 7 other strains including Egypt, Gana, Kenya, Singapore, Senegal, Israel and Taiwan.
- Chitralada has hast growth and high survival rate in various culture conditions.



Red Tilapia

- Red Tilapia first found at Ubonratchathani FRDC is a mutant of *O. nilotica*.
- it can also be produced by cross breed of *O. mossambicus albino* and *O. niloticus*.
- Tab Tim is a Red Tilapia developed by CP, the largest feed meal company in Thailand.
- Red tilapia has gained increasing preference of commercial farmers in Thailand.



Rural Aquaculture Extension

Objective

to persuade and help aqua-farmers to improve their socioeconomic condition and quality of life by making improvement in their farming practices resulting in increased fish production and income.

Factors to success

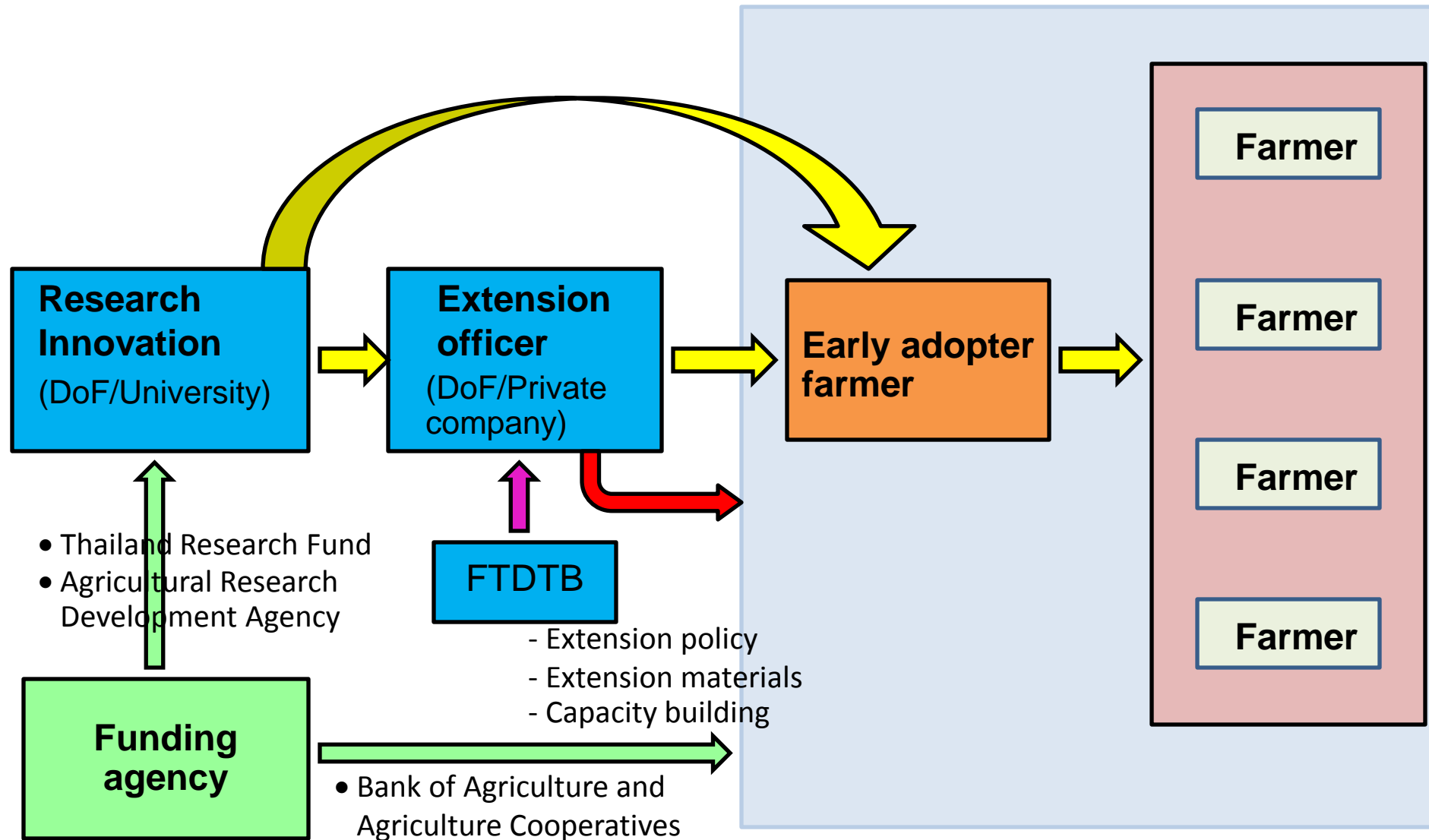
The targeted expansion of aquaculture production will depend on many factors, including;

- development of necessary infrastructure and marketing facilities
- easy availability of required inputs
- information transfer system

Major task of extension

- collect the desired information
- inform and convince the target people/group about the value of new and better technology packages
- make further refinement to suit them and motivate them to adopt it and draw benefit from it

Agencies Involve in Aquaculture Extension and Direction of Information Flow



Extension techniques

- Training and visit
- Demonstration farm
- Producer Meetings
- Educational Materials
- Mass media

Training and visit

- consists of training sessions for farmers to introduce specific technologies which are then followed by farm visits to observe their implementation and outcome,
- training session can take a number of forms, including farmers meeting, conference, workshop, and method demonstration,
- appropriate extension technique for cooperatives, private producers, and subsistence producers



Demonstration farm

- incorporate two main attributes, 1) recognize the importance of demonstrated success of any new technique and its subsequent adoption by farmers, and 2) the importance of farmer-to-farmer communication.
- A technology, which has been successfully developed by researchers to the point where there is good potential for success on the farm, is selected for implementation on a cooperator's farm.
- The cooperator is selected on his or her willingness to devote space and time to the activity, and with resources to meet particular requirements of the new technology.

- Implementation of a new technology on a farm in an area with favourable conditions demonstrates to the local producers the viability and potential benefits to be derived from it.
- Demonstration farms were regarded as one of the most useful extension methodologies.



Producers Meetings

- provide a mechanism
 - to transfer information to a group of farmers at one time.
 - for mutual support and interchange of ideas among farmers.
- demonstration farms and meetings were seen as most important for working with commercial farmer.

Educational materials

- Newsletters, bulletins, fact sheets, and pamphlets can be passed or mailed to producers without farm visits, and can be used to reinforce information presented at producers' meetings or through farm visits.
- In area with a high rate of illiteracy, educational materials must be designed carefully with illustrations which convey information without relying extensively on text.

- A series of manuals on the following subjects is recommended:

fish pond construction, inorganic and organic fertilization of ponds, stocking and culture of fish species in ponds, fish pond management, economic aspects of fish culture, reproduction of freshwater organisms for their culture in ponds, fish health, prevention and cure of parasites and diseases, and preparation of aquaculture products.
- These manuals should be based completely on experiences within the country.



Mass media technique

- Radio announcements and television can be extremely effective means of communication in rural areas where illiteracy exist.
- educational materials and mass media as well as farmer-to-farmer interactions were widely used for exchanging information at farmer, neighbour, and community levels.

Appropriate Extension Technique

Aquaculture is a practical science and hands-on training through **demonstrations, pilot projects** and **training courses** with a strong applied component are likely to be the most successful way of effecting the information/technology transfer.

**Thank you for your
kind attention**