Economic liberalization, rice intensification, and agricultural diversification in the Mekong Delta, Vietnam

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Purpose: What is the impact of liberalization on farmer livelihood systems?

- Since the late eighties, the policy of economic liberalization has generated an impressive growth in Vietnam, particularly in the rice sector of the Mekong delta
- But the effects of such reforms on the dynamics of farmers' livelihood systems need to be better documented.

Methodology based on an historical and systemic approach

- A survey to identify key changes in the socioeconomic environment of the farms
- Intensive on-farm surveys to analyze each of the former and current main types of cropping and farming systems, and to quantify their economic performance.

The site: Omon District, in the central plain of the delta

- A representative diversity of rice ecosystems, mainly irrigated and deep water rice
- Extensive diversity of on-farm circumstances: farm size varies from 0.05 to 6.0 ha, 1 to 9 family workers per farmholding, and 10 to 15% of landless farmers per village
- High productivity in rice production: 10.6 t ha-1 in 1995
- An impressive recent growth in rice production: +17 % per year between 1985 and 1995
- A process of agricultural diversification based on a rapid expansion of orchards.

Economic reforms boost intensification of rice systems

- Market liberalization allowed farmers to sell their rice at a higher price and to restore farmers' capacity to accumulate capital (stage 1)
- Farmers invest their working capital in rice production inputs and motorized equipment to increase land productivity (Fig. 1); especially in double HYR cropping systems in irrigated areas (stage 2)
- Farmers invest further in land improvement, using heavy equipment, to improve water control in deep water areas in order to expand high productivity rice systems. This leads to an impressive increase in land productivity and labor demand (Fig. 2), especially with the expansion of the double HYR cropping system in the deep water ecosystem (stage 3).

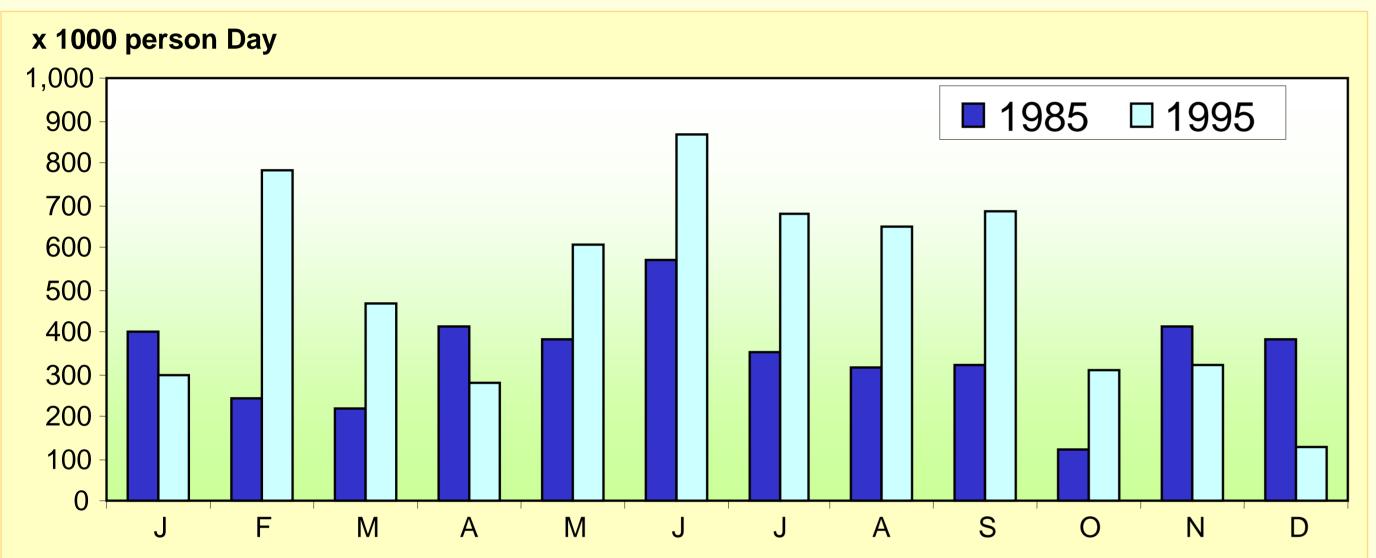


Fig. 2. Changes in labor needs for rice production in Omon District before (1985) and after (1995) economic reforms and rice intensification.

\$ ha⁻¹ y⁻¹ 2 200 3 HYR per year a. Irrigated ecosystem 2 000 1 800 2 HYR per year 1 600 1 400 1 200 1 000 800 600 400 200 b. Deep water ecosystem ☐ Gross added value Services 2 000 Inputs Taxes 1 800 1 600 1 rice crop per year 2 HYR per year 1 400 1 200 1 000 800 600 400 200 1986 - Prior to Stage 3 - 1995 Stage 1 Stage 2 liberalization

Fig. 1. Steps in rice intensification and corresponding changes in rice productivity per main ecosystem, 1986-95 (HYR= high yielding rice).

From rice intensification to diverse farming systems

- With rapid economic growth, the demand for nonrice products increases,
- Farmers use their new capacity to invest, regained thanks to rice intensification, to diversify their production systems into nonrice crops, often on raised beds (sugarcane, tangerine, etc.),
- The diversification of rice-based production systems contributes to an overall intensification in working capital, fixed capital, and labor, which leads to more increases in family incomes.

An increasing differentiation among farming households

- The dismissal of the "production groups" resulted in an increase in differentiation among farmers in terms of land endowment and availability of fixed capital (Fig. 3)
- Reforms led to greater differences among farmers regarding investment capacity and increased inequalities in term of capital accumulation opportunities
- As a consequence, economic liberalization generated a significant differentiation among farmers in terms of production systems and income level (Table 1).

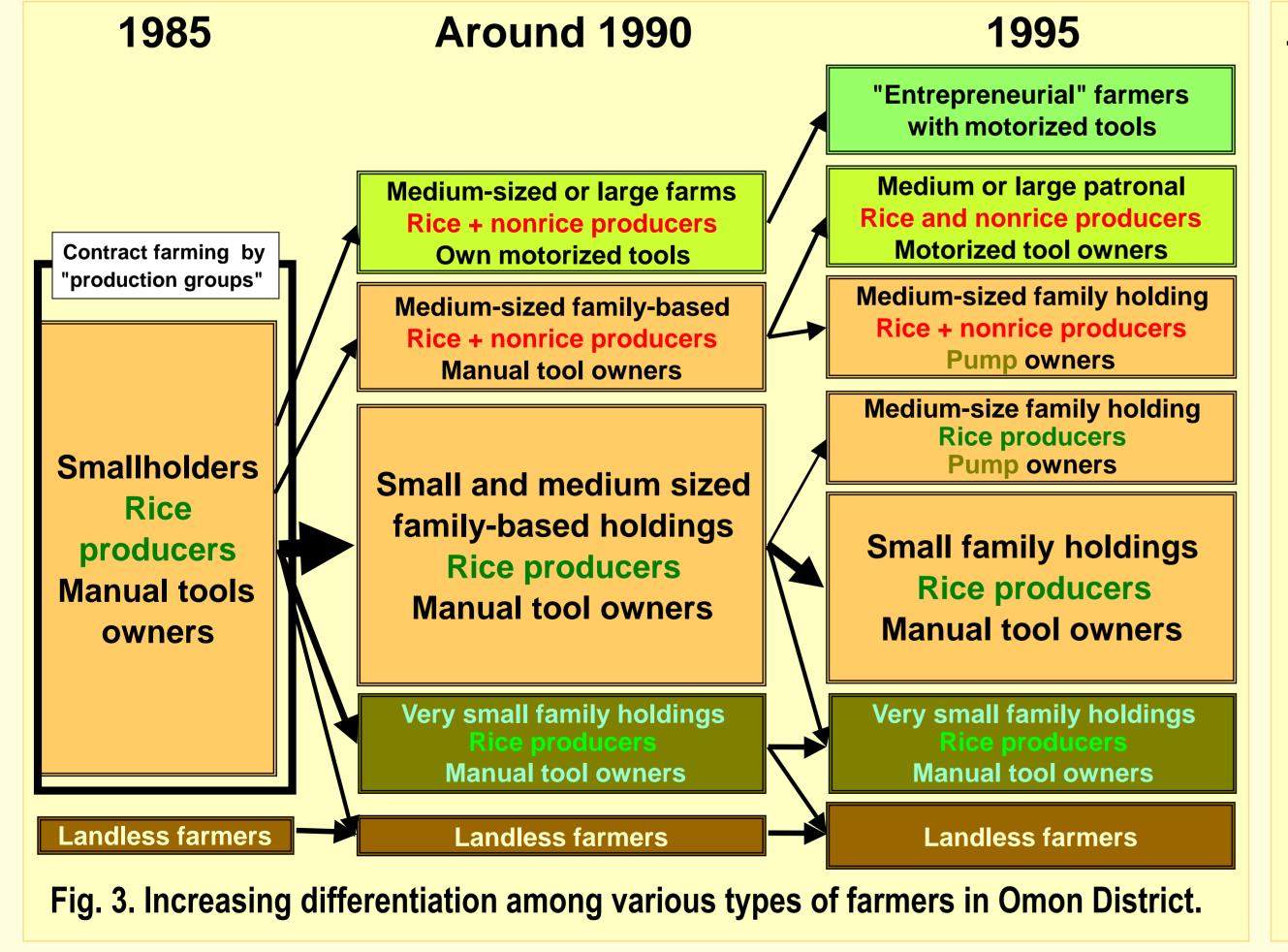


Table 1. Characteristics of main types of farming households in Omon District, Mekong Delta, 1995.

Type of farmer	Landless	Very small family holdings	Small and medium family holdings	"Patronal" farmers	"Entrepreneurial" farmers
Frequency (%)	10	15	55	9	11
Type of production systems	-	Rice	Rice (+ nonrice)	Rice + nonrice	Rice + nonrice
Average farm size (ha/household)	0.05	0.40	1.30	2.45	2.35
Type of equipment owned	Manual	Manual	Manual (or motorized)	Motorized	Moto-mechanized
- Type of off-farm activities	Hired farm laborer	Hired farm laborer and/or small-scale fishing	Hired farm laborer and/or small-scale fishing, trade or handicrafts	Small-scale trade or handicrafts	Agricultural services, large-scale trade, product processing
Net family income (\$US labor ⁻¹ year ⁻¹)	157	220	332	539	518

Conclusions

- The economic liberalization in Vietnam established a socioeconomic environment that allowed most farmers in the Mekong Delta to intensify their rice production systems, to increase their family incomes in general, and, subsequently, to diversify their on-farm and off-farm activities.
- But the overall intensification of rice-based production systems, implemented by very reactive small-scale family-based farming units, also led to a greater differentiation among farming units in term of availability of productive resources and income levels. Such social inequalities need to be addressed to ensure a more sustainable pattern of economic growth in this key region of the country.
- In particular, more attention should be paid to the generation of nonfarm activities and employment opportunities for farm laborers who have to abandon the agricultural sector.

References

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