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Introduction

The recognition of power relations, conflicting self-interests, and potential inequalities over time, is a first step towards sustainable and responsible value chains. In this paper, we focus on a 44 km² watershed in an Island in the French West Indies, Martinique.

Mat & Methods: the Galion watershed

We focus on a 44 km² watershed in an Island in the French West Indies, Martinique. This watershed concentrates different competing value chains, different power relations, different access to factors of production, and different business models. The elements in common between the stakeholders are the geographical location, the constraints of stringent norms and standards towards less dependence on synthetic pesticides, and a strong attachment to the island. We interviewed 54 farmers in vegetable, sugarcane, breeders, arborists and banana production.



Results: the challenge of labor

Vegetable farming in Martinique dates back some 60 years, and was defined in opposition to banana and sugarcane crops (Chauleau, 1973; Larose, 2015). We used the following variables for the typology: the hourly wage, daily employment, full time equivalency, unit time equivalency (Signarbieux, 2022).

Tab. 1 Typology of the 24 vegetable farmers in the Galion watershed. Source: Signarbieux (2021).

	First class.	Second classification	Third classification	Prospects
1a	> 50 years old	Food crops	Formal medium farms, family labor	Low income: decline
1b	> 50 years old	Food crops	Formal small to medium farms, paid labor	Low income: decline
3a	> 50 years old	Diversification	Formal medium farms, mechanized	Medium income, livestock: rise
3b	< 50 years old	Vegetable farm, livestock, and off-farm income	Formal small farms, family labor	Medium income: rise
2	< 50 years old	Vegetable farm and off-farm income	Formal small farms, mechanized	Medium income: rise
5	All ages	Jardin Creole	Informal farms, self-consumption	Low income: resilient
4	All ages	Niche market	High value vegetable niche market	High income: rise
4	All ages	Niche market	High value tree crops niche market	High income: rise

The typology reveals that most farms with intensive family labor will probably decline in the near future because the income does not cover all transactions costs to access the factors of production: paid labor, land, processing units, and public aid.

1946 : A false agrarian reform:

The state then bought land, in the form of a credit retrocession. And this land was then distributed to those who worked the land. For large owners, this will be an opportunity to release their capital which was immobilized in agriculture, to turn to more economically profitable sectors. However, the plots are expensive and the cost of labor too. There are therefore few solvent buyers, so the owners will sell to the state with short-term credit conditions. This capture of the value added by the large owners is still at work today, based on this work scheme, namely the large owners holding the capital that manages large farms. Hence the interest of looking at the courses less in taking these large owners, namely market gardening. Especially since the added value is higher, and can be distributed differently

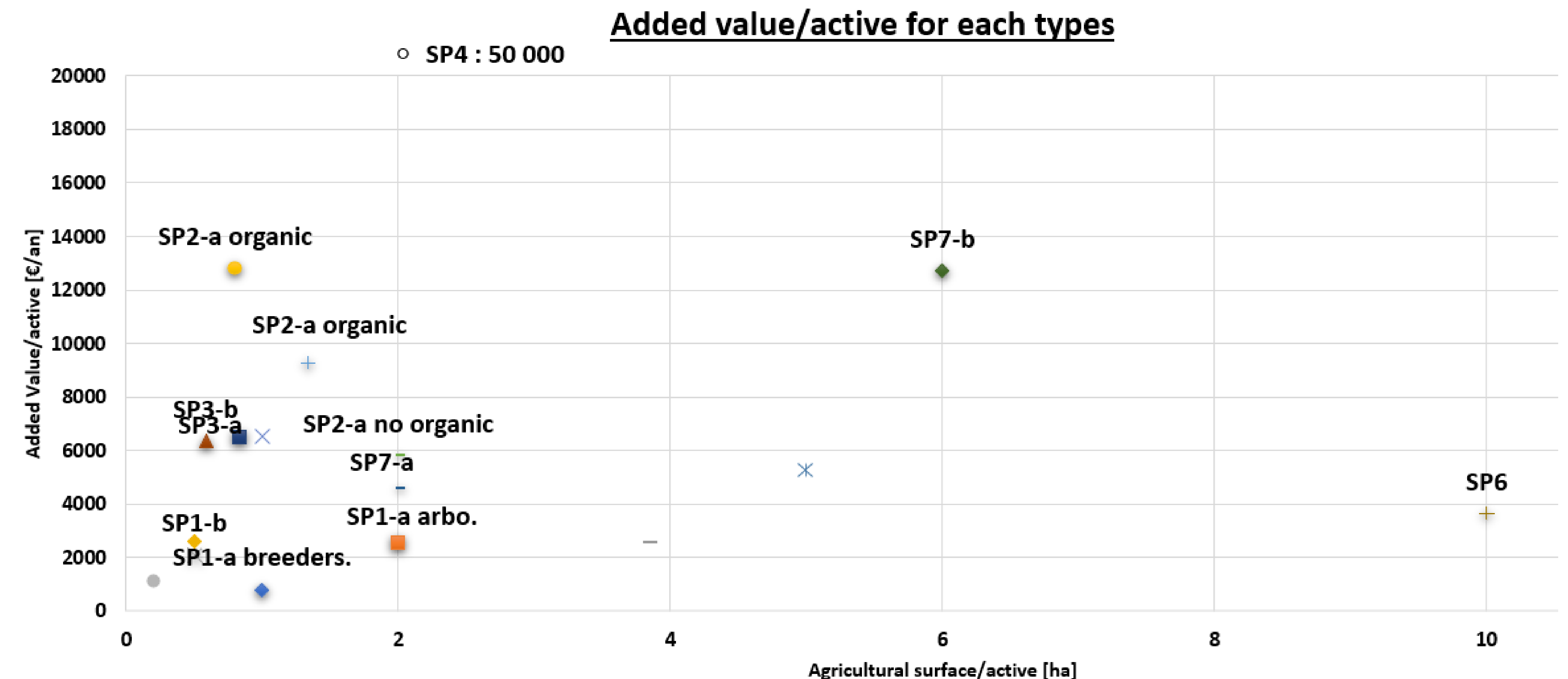


Fig. 1 Added value in the watershed of the Galion, in Martinique. Source: the authors

Conclusions and perspectives

New alliances between the different stakeholders should be based on

- 1) higher farm-gate prices to small farms in order to influence the opportunity costs in favor of new certification schemes,
- 2) investments in human capital among extension services,
- 3) Accessibility to small mechanization, thanks to higher and better targeted subsidies to small vegetable farms in order to reduce the current transaction costs to access the subsidies. Supply chains could not only compete for natural resources, including land, but also for labor.

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