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## **ILLIAD project: Sustainable, local or localised, innovative food chains – application to apricot production**

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**ILLIAD** (a French national project, 2012-2015) proposes a method to analyze the system sustainability of food chains. The sustainability of food systems has been defined in terms of their effects on environment, economics and society, until now. ILLIAD aims to propose a method that allow to take into account the ability of these food systems to perdure or develop, in the long run, and aims to access their ability to increase their positive effects on environment, economics and society.

### Methodology to analyze the systemic sustainability of the food chain

Four practical cases describing the three typical trajectories (Figure 1):

- the chain innovation / creation of a new chain (peach and apricot) (Figure 2)
- the chain differentiation / development of distinctive products (rice and spelt)
- the territorial embedding / strengthening interlinkages between economic activities (wheat and equestrian centers).

Food chains subject		Apricots	Peaches	Bread Wheat	Rice
Context		• Consumers and governments request more sustainable food chains : environmental (less pesticide, moderate use of water), economical (to resist to a crisis and to ensure prices), social (alternative food system like CSA). Today, Nothing permits to evaluate the sustainability of each food chain			
		• Loss share of market • Marketing and production are not really organized • Strong competition in EU	• At least 22 yearly treatments	• Fluctuating price • Weakness of yield • Problem of nitrogen nutrition • High cost for organic manure (turb from cattle/horses food chains)	• Strong demand for a quality rice (nutrition, taste and health) • same problem between local rice food chain and Epeautre
		• fruit processors rely on the surplus fruits from fresh consumption			
Scope of the project		• Creating a new alternative local and sustainable food chain (definition, indicators, technical and organizational) → theoretical model applied for each food chain			
		Development of alternative marketing channels, as catering, out-of-home dining, direct sales from producers to consumers of other areas Creation of a specific chain dedicated to processing	Development of low-input or organic practices	• Horizontal relationship between wheat and cattle food chains to increase value (for turb and fodder)	• study short and long marketing channel • study criteria of success of Epeautre area for rice food chain
Partner for each Work		UMR MOISA			
		UMR SQPOV U GAFL IAMM	IAMM UE Gotheron UMR SQPOV	ITAB	CIRAD
Subcontractor		SICA CENTREX			
		CA Drôme SEFRA	CA Drôme Efficient Innovation	CIVAM	
Geographical Area		Languedoc Roussillon / Rhône Valley			
				Languedoc Roussillon / Rhône Valley	Haute Provence Camargue Vietnam

Figure 1: Food chains studied in the ILLIAD project

The expected results for apricot chain could be of great interest in defining both fresh and processed fruit ideotypes. One hindrance for development of orchards dedicated to processing is the high cost of manpower. So, our project includes the experimental analysis of mechanical harvest of orchards (see poster Gouble et al.).

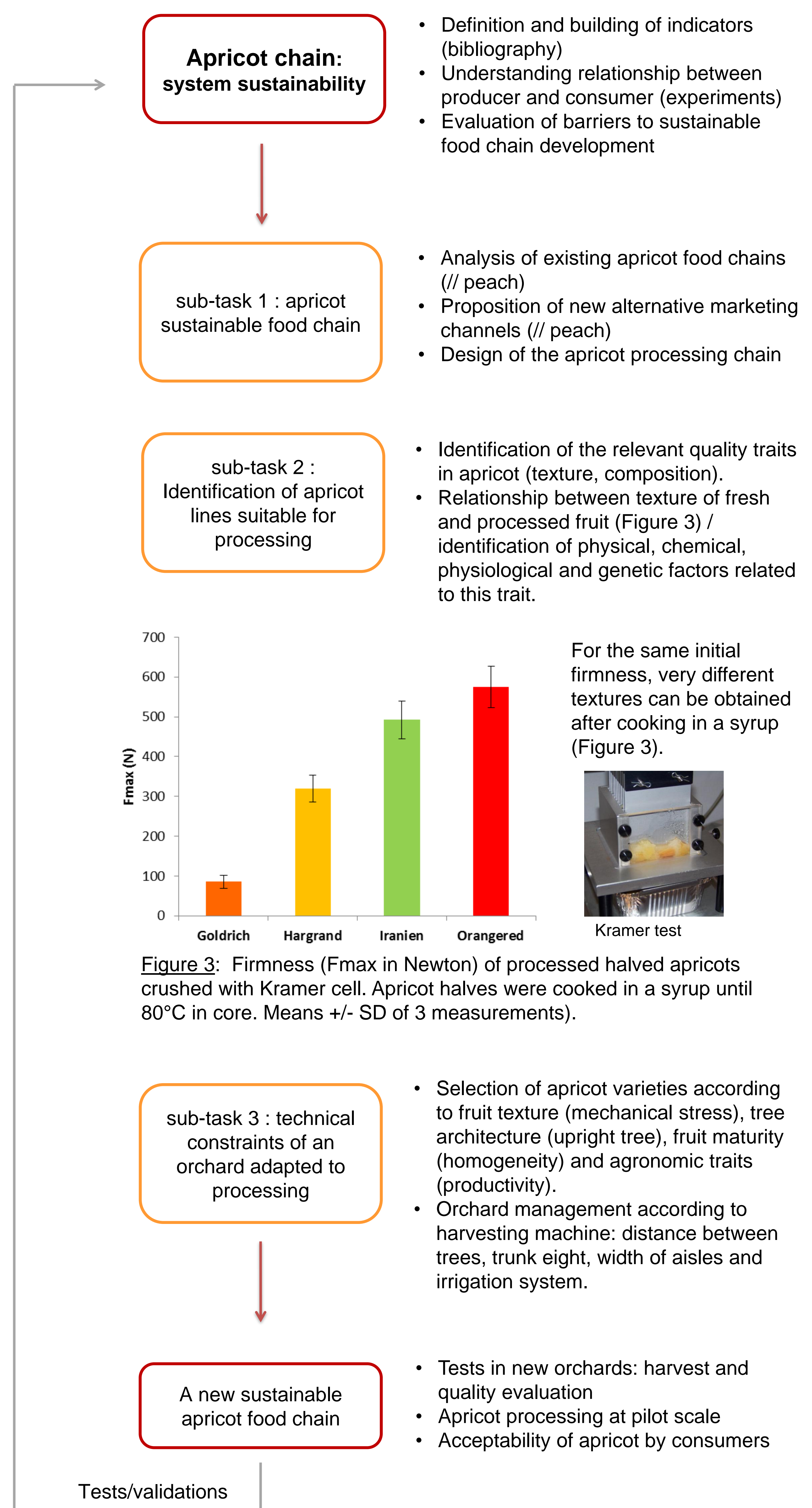


Figure 2: Focus on apricot chain

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