



Mauritius Chamber of Agriculture



CHALLENGES OF AGRICULTURAL DEVELOPMENT IN MAURITIUS

Educational cooperation project conducted from March 31st to April 14th, 2019 by the BTS DARC students from Saint Paul agricultural college (Reunion Island) in partnership with 1Mauritius REAP AAOI establishment: the FAREI¹ and 3 professional partners: Velo vert² Chamber of Agriculture³ and Jtagro⁴

As part of their agricultural extension officer's training, 20 BTS DARC⁵ students from St Paul agricultural college studied the agrarian system and agricultural development in the 3 districts of southwestern Mauritius: Savannah, Wilhems Plains and Black River. Bordered by lagoons that extend by west and south coastal plains, mainly cultivated in sugarcane, the territory of 3 districts is characterized in its central part by one of the last mountainous forest of Mauritius which constitutes the national park of the Black River Gorges. The eastern part of the territory is a mid-altitude plateau (between 500 and 600 m) with a rainy temperate tropical climate that includes the majority of the population in a modern conurbation of more than 300,000 inhabitants.



Landscape of the sugarcane fields in the west plain of the territory



Cyber city of Eben in the east plateau of the territory



Visit of the vegetables area of "Plaine Sophie" (Plaines Wilhem) supervised by a FAREI extension officer

The first week allowed the students to define the current agrarian system. It is still dominated by the sugarcane crop cultivated on the lands by large scale farmers. The mid-altitude areas, very wet (more than 2000 mm annual rainfall), are characterized by food crops mainly conducted by small farmers on plots a few acres. In recent years the sugar estates have also begun to cultivate vegetable and fruit crops, which they drive on the sugar cane model over large irrigated areas by mechanizing most operations.



Small-scale food crop farmers - La Chaumière cooperative

The second week, students completed their study by conducting surveys with small farmers and studied development projects implemented by local actors.

This field survey shows that, like in other areas of Mauritius, farmers face two major challenges for the coming years. The first is the need to change crop management and start agro-ecological transition for offering to Mauritian consumers healthier products free of pesticide residues. The second challenge is the necessity to change the sugarcane commodity management because of the end of sugar price support by the European Union and the end of sugar quotas, serious problems of profitability for growers.

BTS DARC students studied four projects implemented by the stakeholders on the territory to face these 2 challenges :

- EMBEROI⁶ project led by the Velo Vert association for the promotion of organic farming without chemical inputs. Several

¹ <https://farei.mu/farei/>

² <https://fr-fr.facebook.com/LeVeloVert/>

³ <http://chamber-of-agriculture.mu/>

⁴ <https://www.jtagro.com/>

⁵ Développement Agriculture Régions Chaudes

⁶ <https://www.youtube.com/watch?v=DzNUdSmdxT4>

Le programme de coopération éducative transfrontalière des établissements du REAP AAOI (Réseau des Établissements Agricoles Professionnels de l'Afrique Australe et Océan Indien) est cofinancé par l'Union européenne et la Région Réunion



agro ecological devices are being tested on pilot sites with the support of experts from Réunion (isolife⁷)

- the SMART agriculture project⁸ led by the Mauritius Chamber of Agriculture in collaboration with FAREI, which consists of experimenting on a network of demonstration plots of agro ecological protection devices to limit the proliferation of pests and limit chemical inputs. Program conducted with the support of CIRAD Reunion.

- the Britania project supported by FAREI for the Ministry of Agriculture of Mauritius. It is a pilot site on which farmers, supervised by a team of technicians, are installed on the plots that must be conducted strictly in organic farming.

- the pure Farming project carried by a sugar company (Alteo group IBL) and led by the NGO Jtagro. This is a reasoned farming system conducted under insect proof nets with agro ecological protection devices (service plants, traps ...) to produce fresh quality products certified by a laboratory and marketed by a plate form that guarantees the cold chain and quality (proxi fresh⁹) to hotels and supermarkets.



Ecological agro vegetable garden of Bel Ombre green Velo project



Greenhouse insect proof and service plants on the site of Britania



Ecological agro vegetable with augmentarium plot smart agriculture project



Project Pure Farming Jt Agro in Gros Cailloux

Results

The students analyzed assets and constraints of the projects during their visits, documentary studies and field surveys. They noted that stakeholders will change quickly Mauritian agriculture and improve farmer's skills to promote sustainable good practices that respect human health and the environment. For that they could build on the following assets : a strong demand for fresh and quality vegetable and fruits , a good farming experience of for both small and large growers, a competent research and extension services for food crops, agronomic skills and significant financial means in large farms. However, there are a number of constraints such as land tenure, gaps of agricultural training and the old age of many small farmers, no organization of the food products market which prevents the visibility of healthy products, the lack of local certification AB and AR, and the difficulty for finding at low costs alternative inputs for sustainable and good practices (AB seeds, organic fertilizers, bio pesticides, grafted plants, etc.).

The second challenge is «the profitability of sugar cane cultivation". The stakeholders are looking for solutions to maintain the landscape and the local economy of this historical crop. The diversification of products from sugarcane is a first solution: cane energy, special sugars, ethanols, rum, vinasse. Organic cane could be a solution as well. I . Diversification on the non-sugar is an other way to maintain the economic viability of sugar companies, so several sugarcane fields have already moved to large-scale vegetable plots as potato, onion, carrot lettuce etc.. . and are part

⁷ <http://www.isolife.org/>

⁸ <http://chamber-of-agriculture.mu/smart-agriculture/>

⁹ <http://proxifresh.com/>

of sustainable farming promoted by label (eg "the gardens of Medine), fruit crops (Pineapple Victoria, Macadamia, etc. ..) or crops with high added value (coffee, tea). In parallel with this evolution, agricultural landscapes on the lands of large estates are changing with a new estate projects: smart cities, business centers, university campuses, hotel complexes, golf etc ..



Large-scale diversification of sugar companies (corporate) Rivière des Anguilles (Savannah District)



Large-scale tomato crops from Medine agricultural Ltd in Black River District

This study enabled students to mobilize their capacity to analyze agricultural development in a territory and the change of agrarian system. It was evaluated by a assessment at the end of the first week by the teachers and then in the second week to the institutional and professional stakeholders involved in the projects. One of the conclusions of this first study, underlined by the Ambassador of France in Mauritius and support by Régional Council of Reunion Island , is the need to mobilize the technical agricultural education of Reunion Island and in particular the agricultural college of Saint Paul, to take part in the creation of an technical agricultural high school on Mauritius, a link necessary to accompany the agro-ecological transition and to train the future farmers .



End of first week : Agrarian system and development assesment



Presentation of the study at the French Institute of Rose Hill in the presence of the Ambassador of France, the director of the SCAC, the representative of of the Reunion Region local office and the professional partners in Mauritius (FAREI, Chamber of Agriculture, Velo Vert, JT agro, Bel Ombre sugar companies ,leaders farmers of Plaines Sophie)



Acknowledgments and congratulations from the Ambassador of France

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