APPENDIX I

TABLE AI-1

Basic Indicators for Costa Rica and Cuba, 2008

	Costa Rica	Cuba
Population (millions)	4.518	11.202
Area (1,000 Km2)	51,000	115,000
Per capita GDP , at constant market prices (dollars at constant 2000 prices)	5,188.5	4,362.9
Agriculture GDP (% from total GDP)	10%	3.8%
Economically active population in agriculture (% from total EAP)	12.3%	19%
Public expenditures in education (% from total GDP) (2007)	4.7%	13.3%
Public expenditures in health (% from total GDP)	7.1%	11.5%
Degree of openness of the economy, at current prices (millions of dollar)	101.0	44.9
Exports of goods, by sector of economic activity: agriculture, hunting, forestry and fishing (millions of dollars, 2007)	1,963.0	105.9

Source: Author's elaboration from CEPAL (2010).

APPENDIX II

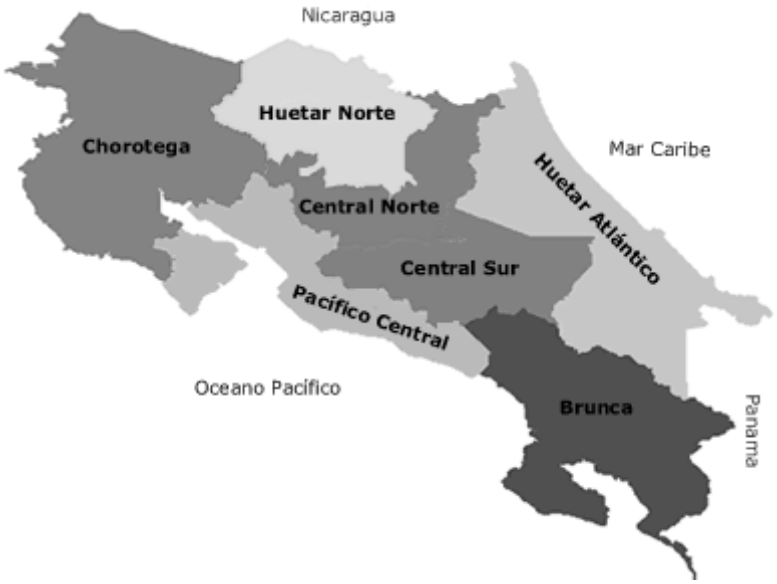
Costa Rica is a small Central American country with 4.5 million inhabitants and an area of 51,000 km2[1]. This developing country has a strong agricultural sector which is regarded as one of the most competitive in the region. Costa Rica has been generally accepted as a successful example of outward-looking development where some spaces have been created for small farmers through RNFE and contract farming. Yet, outward-looking policies have transformed the internal dynamic of the sector from a social and productive perspective. Since 1990, Costa Rica has further promoted an outward-

[1] Costa Rica is one of the most stable democracies in Latin America. The army was abolished in 1948. Since then state expenditures previously devoted to the military have been channelled towards economic and social development.

looking agrarian strategy with an important expansion of agricultural exports (particularly NTAEs), which represented 33% of total exports of goods in 2008. Agriculture alone generated approximately a 10% share of GDP in the same year. If forward and backward linkages of agriculture with agro-industry, the food industry and the fertiliser industry are considered, primary activities represented a 32% share of GDP in 2008[2].

MAP AII-1

Costa Rican regions



Source: MIDELPLAN (2007).

Costa Rica is divided into five regions (Brunca, Central, Huetar Atlántica, Northern Huetar and Chorotega) which comprise of 81 cantons and 469 districts (excluding Isla del Coco) each with different levels of development. The Central region (formed of San José, Alajuela, Heredia and Cartago) is the most developed area in Costa Rica. Of the 173 districts with relatively high levels of development in the country, 163 belong to the

[2] Approximately 45% of agricultural production is employed as inputs in other industries or sectors. The agro-industrial sector, most of which is reported within the food industry, accounts for another 9.5% of GDP. If agricultural services are also considered, their contribution to GDP could possibly add another 8%. All together, the agricultural conglomerate accounts for about 32% (IICA, 2006).

Great Metropolitan Area (GMA), which is situated in the Central region, and 10 are located nearby in the Alajuela province. The remaining districts exhibit much lower levels of development and are located in rural areas outside the Central region (MIDELPLAN, 2007). According to the Social Development Index,[3] there is an inverse relationship between population density (especially high in the GMA and low in rural areas) and relative levels of development. Areas classified as relatively more developed account for 53.9% of the population and occupy 5.4% of the national territory (MIDELPLAN, 2007). Most of them are located in the Central Valley. By contrast, relatively less well developed areas located in rural areas outside de Central Valley account for 94.6% of the total territory of Costa Rica but only 46.2% of the population (MIDELPLAN, 2007).

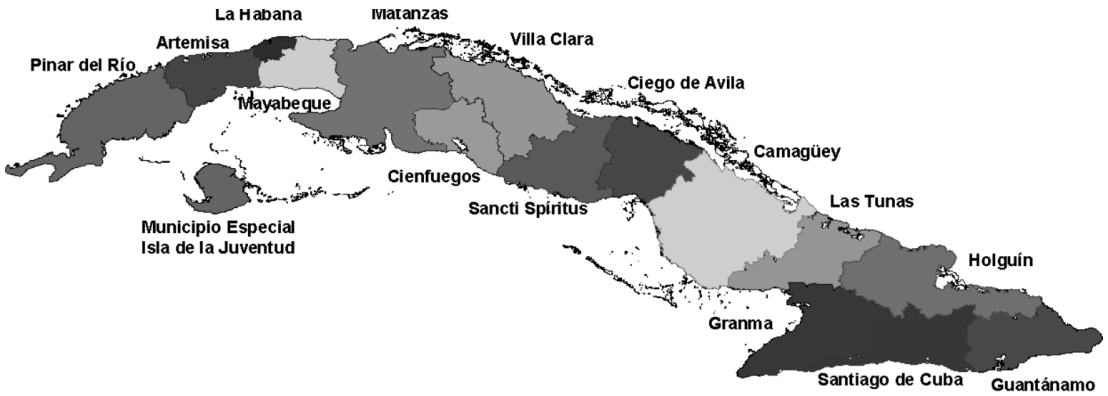
APPENDIX III

Cuba is the biggest island of the Caribbean basin, with 11.202 million inhabitants and 115,000 km2 of land. Cuba is approximately three times the size of the Netherlands and half of the size of Minessota State, which is 12th largest in the US. With a total area of 110,860 km2, the island is dominated by expansive plains (occupying two-thirds of the total) and three well-defined mountain ranges.

[3] The Social Development Index (IDS) derives from a Ministry of Development and Planning (MIDELPLAN) effort to build a System of Indicators on Sustainable Development (SIDES) to capture environmental, social and political dimensions of economic development. Among SIDES social indicators, IDS summarises and measures geographical gaps between different cantons and districts on levels of development. Its high level of disaggregation can mirror the different impacts of the model per district or canton in all the regions and provinces of the country (MIDELPLAN, 2007).

MAP AIII-1

Cuban provinces



Source: ONE (2012).

Cuba has a highly diverse natural biodiversity, soil types, geographic landscapes, geological ages and microclimates. The country presents 48 well defined natural regions, each with specific climatic, vegetation, and landscape characteristics from rainforest to semi-desert (Gutiérrez Domenech & Rivero Glean, 1999). Cuba's heterogeneity favours its high natural biodiversity, with 19,631 known plant and animal species of which 42.7% are endemic (Funes-Monzote, 2006; ONE, 2004).

Although Havana is the main economic centre, each of its provinces is important agriculturally, culturally and economically. Population density is higher in Cuba (98 inhabitants/sq. km) than in Mexico (50), Central America (68), and South America (17), (though it is lower than average in the Caribbean region, 139) (FAOSTAT, 2004). More importantly, Cuba presents a high percentage of arable land; each arable hectare only needs to feed less than two people per year. While in Latin America as a whole the agricultural area is about 34% of total land, in Cuba approximately 60% of its land is appropriate for agriculture (ONE, 2004; FAOSTAT, 2004). Yet, today less than 25% of the population lives in rural areas; only 11% of them work directly in agricultural activities (Funes-Monzote, 2006; ONE, 2004).

After the collapse of the Soviet Bloc in 1989, agriculture as a share of GDP dropped from 9% to 3.8% in 2008. In the same year, primary activities employed 19% of the working population. Cuba is the only country in the world that was forced to reject neoliberal agrarian policies (given the socialist system adopted in 1959) and embarked instead on a nation-wide and perhaps "temporary" experiment of inward-looking development to face the collapse of trading relations with the Soviet Bloc. Based on internal liberalisation, food import substitution and sustainable small farming, inward-looking development completely transformed the island's land distribution, increasing the contribution of small farmers to national food security. Cuban small farmers are grouped in two distinct types of cooperatives: Cooperative of Agriculture Production (CPAs) and Cooperative of Credit and Service (CCSs). In CPAs, small farmers own the land collectively, while in CCSs small farmers own the land individually. Usufruct and disperse farmers are also engaged in small scale production on an individual basis with much smaller plots than CPAs and CCSs. Yet, there is not a standard size to define small holders in Cuba.

APPENDIX IV

TABLE AIV-1

Evolution of ratios of imported food in Cuba (Kg/person/year)

(1990-2007)

Food groups	Difference in percentage points (2005-07/1990-92)
Cereals - Excluding Beer	**-6.7**
Starchy Roots	**-1.28**
Sugar & Sweeteners	14.06
Pulses (e.g. peas, beans and lentils)	**-20.6**
Oilcrops	58.2
Vegetable Oils	**-21.3**
Vegetables	**-0.66**
Fruits - Excluding Wine	0.28
Meat	**-19.04**
Offal	9.09
Animal Fats	53.65
Milk - Excluding Butter	24.2

Source: Author's calculation from FAO (2009).

Using FAO data (2009) on food imports (Kg/person/year) and food available for consumption (Kg/person/year), the computation of import dependency ratios per food group were calculated for two different periods: 1990-92 and 2005-07. from 1990-92 to 2005-07 the island decreased its ratios of imported (Kg/person/year) cereals, starchy roots, pulses, vegetable oils, vegetables and meat, basic food crops to sustain the Cuban diet. By contrast, during the same period, import ratios for other food groups increased. This was the case of sugar, oil-crops, fruits, offal, animal fats and milk (FAO, 2009; Ross, 2004). Special attention should be paid to the group of products oriented towards covering basic food needs in Cuba, which are mainly produced by small farmers. This is the case of most cereals, roots, pulses (peas, beans and lentils), vegetables and meat. In the group of cereals and pulses, decreasing import ratios were largely attributable to the contribution of the non-state sector to the basic grains available for national consumption. This sector produced 77.8% of rice, 87.1% of maize, and 91.5% of beans

in 2000 (ONE, 2000). Moreover, in 2008 private small farmers alone produced 82% of maize, 81% of beans and 36% of rice available for national consumption. Another example is meat, which also exhibited decreasing ratios from 1990 to 2007. These trends in meat production can be related to the fact that in 2006, the private small farming sector only accounted for 12.9% of the grazing land but owned 43.5% of Cuba's livestock (MINAGRI, 2007; ONE, 2010). Many of these private small farmers are engaged in urban and suburban agriculture.