

5 Economy

Prepared by: André Ullal, Ricardo Serpell, September 2018.

This section describes the current, historic and potential future economic activity on the island. It focusses on basic forms of production: agriculture, mining and quarrying, manufacturing and construction. Tourism – a category of services that includes components of accommodation, entertainment and retail trade – is addressed here given its economic significance on the Island. cursory discussion of resources for production in this chapter refers to more detailed descriptions of resources in following sections. The picture of economic activity is limited by lack of economic data, including subnational data for Chile and historical data for Rapa Nui. Since 1966, the Island has been completely exempt from taxation according to Law 16.441 (Ley Pascua [1]). As a consequence, detail records of economic activity are scarce. Exemptions include: custom duties over imported (international) machinery and construction materials, taxes according to “current or future legislation” over capital assets located on the Island and income derived from said assets, including territorial taxes, taxes over contracts signed on the Island by individuals or companies residing on the Island, in relation to activities or goods located on the Island.

5.1 Income and employment

Statistical sources and academic literature provide some indication of levels of production and income. Per capita income on the island in 2012 was estimated in the range of USD 8,000 - 15,500 [2]. The middle-value of this wide range – USD 11,750 (compared to USD 15,431 for Chile in the same year) – places the Island within the World Bank’s upper-middle income bracket, comparable to that in Turkey (USD 11,720). Taking into account the 2012 population of 5,761, 2012 per capita income suggests a total annual income between USD 46 and 89 million.

In 2005, 22.6% of the population declared working in commerce, accommodation and restaurants, 15.0% in public services, 5.9% in agriculture and 2.1% in fishing [3]. A study from 2007 showed 90% of the population was directly or indirectly working for the tourism sector [4].

5.2 Tourism

Tourism is the most significant economic activity on the island.¹ Data published by the Chilean Service for Tourism recording airport arrivals shows 118,771 visitors in 2016, up from 45,346 in 2007, with an average annual increase in arrivals of 9.6% [5,6]. The visitors to the National Park increased from 36,412 to 68,903 over the same period, suggesting an average annual increase of 6.5%. Additional visitors arrive in maritime cruisers. Information on their total number is not available, however, their economic impact is comparatively small. The explosive growth of touristic demand over the last 20 years has been accompanied by an equally explosive growth of the offer. Between 2009 and 2016, the number of motor vehicles increased 44%, reaching 2,508 vehicles [7], at an equivalent annual growth rate of 4.8%. At the same time, the accommodation offer, formerly comprised mostly of informal

¹ *Tourism* here comprises the ISAC category of accommodation and significant components of the entertainment and retail trade categories.

family bedroom rentals, has rapidly evolved into a formal accommodation industry based on medium sized hostels (< 25 beds) and cottage rentals [8].

The amount of income derived from tourism on the Island is unclear. The Chilean Service for Tourism estimates tourist spending of USD 170 per day as a national average. However, 2014 data for Rapa Nui shows tourists spent significantly more on the Island: USD 210 and USD 330 on average, for foreign and national tourists, respectively [8]. Considering 118,771 tourists in 2016, with an average stay of 4 days [9], total income from tourism in that year can be estimated at around USD 119.7 million (around USD 16,500 per capita).

The Chilean Service for Tourism does not provide disaggregated data to describe tourists to Rapa Nui. Questionnaire surveys suggest 36% of tourists to Rapa Nui are Chilean and, of the 64% that are from elsewhere, the most represented countries are the United States (15%), France (15%), and Peru (13%). The main reason cited by tourists for visiting the Island was archaeological and cultural heritage.

5.3 Agriculture, forestry and fishing

Agricultural production, including cultivation, animal husbandry and fisheries, serves local consumption requirements only, with no exports of these primary products [2].

The *Censo Agropecuario 2007* [10] provides the most recent official description of agricultural production in Rapa Nui. The census identifies around 180 hectares under crop cultivation (around 1% of the total land area) on 195 land holdings. All informants for the census – that is, all land-holders – were Rapa Nui. Total cultivated area had experienced a small decrease from the 191 hectares reported in the 1996 census [11]. No *industrial cultivation* was recorded for the Island, suggesting all cultivation was small scale and for local consumption. Only 12.2 hectares (around 7% of cultivated land) were being irrigated. The main crops were: vegetables (43% of cultivated area), fruits (30%) and legumes and tubers (22%).

Observations suggest that the total cultivated area has been increasing. In 2016, 798 hectares were identified as being used for agriculture (aprox. 4.8% of the total land area) [8]. In satellite imagery, cultivation appears to be concentrated to the east and north-east of Hanga Roa. Uncultivated land in these areas provides scope for the expansion of crop production.

Animal husbandry identified in the *Censo Agropecuario 2007* [10] was limited to cattle (2,284 head) and horses (604 head). Notably, cattle pastures accounted for 2,284 hectares, or around 7% of the total land area and around 12% of the area outside the National Park.

Official current fisheries data for Easter Island is not available. There are 5 small fishing harbours in operation on the Island: La Perouse (northeast coast), Vaihu (south coast), Hanga Nui (west coast near ahu Tongariki), Hanga-Roa Otai and Hanga Piko (both near Hanga Roa). In 2010, there were 11 ships and 86 fishermen registered with the National Service of Fishing (SERNAPESCA) [12]. Catches estimates for 2010 ranged between 150 and 200 tonnes a year [13]. Main species targeted were the *Pacific Chub* and *Yellowfin Tuna*. In 2011, the National Fishing Service (SERNAPESCA) reported 123 artisan fishers and 31 boats operating from the island [14].

Forestry identified in the *Censo Agropecuario 2007* [10] accounts for 252 hectares of eucalyptus plantations. The current economic value of the use of eucalyptus is low (it is a fast-growing hardwood

with an irregular grain that makes it less suitable for many applications in construction). The plantations were originally intended as a source of biomass for electricity production.

5.4 Mining and quarrying

No petroleum products or precious minerals are mined on the Island or within the Exclusive Economic Zone. Company registration data from the Chilean *Servicio de Impuestos Internos* (SII, lit. Internal Tax Service) records no businesses engaged in mining or quarrying [15].

Two functioning quarries on the Island are apparent in satellite imagery: on the south coast (S 27° 10' 00'', W 100° 23' 08'') and in the forest plantation near the centre of the Island (S 27° 8' 25'', W 109° 22' 15''). Reports suggest that the quarry on the south coast provides aggregate for concrete construction.

5.5 Manufacturing

Academic studies that describe economic activity on the Island make no reference to manufacturing or any other form of industrial production [8]. Company registration data records one manufacturing enterprise in 2015 (down from three manufacturing enterprises registered in 2014) [15]. The type of manufacturing is not recorded, nor are any employees recorded for the single operating manufacturer. The viability of medium and large-scale manufacturing on the Island is perhaps limited by access to markets and the cost of transportation of manufacturing inputs (labour, energy, materials). Nevertheless, small-scale manufacturing may be occurring within informal workshops that elude SII registration.

5.6 Construction

While official statistics are not available describing construction output, indications of levels of construction activity are available from business registration and construction permit data. Four construction enterprises were registered with SII in 2015 [15]. No employees were registered with these firms, down from a total of four construction workers registered in 2013. In contrast with otherwise low construction employment recorded in SII data, the years 2008, 2009 and 2010 record relatively high employment of 315, 481 and 401 persons respectively. During these years, construction accounted for the majority of official employment. For example, in 2009, 481 construction employees represented 79% of recorded employment on the Island.

Construction permit data recorded by the *Instituto Nacional de Estadísticas* (INE) provides a more useful indication of construction activity given the operation of informal firms not registered with the SII for taxation purposes [16]. INE data records approval of 8,249 m² of construction in 2015, most of which (7,914 m²) was for new construction rather than extensions to existing buildings. Housing accounted for 56% of approved construction in 2015. Figure 5.1 describes the amount and type of construction approvals from 2010 to 2015. In addition to permitted construction activity, other informal construction activity is expected for which approval requests were not submitted.

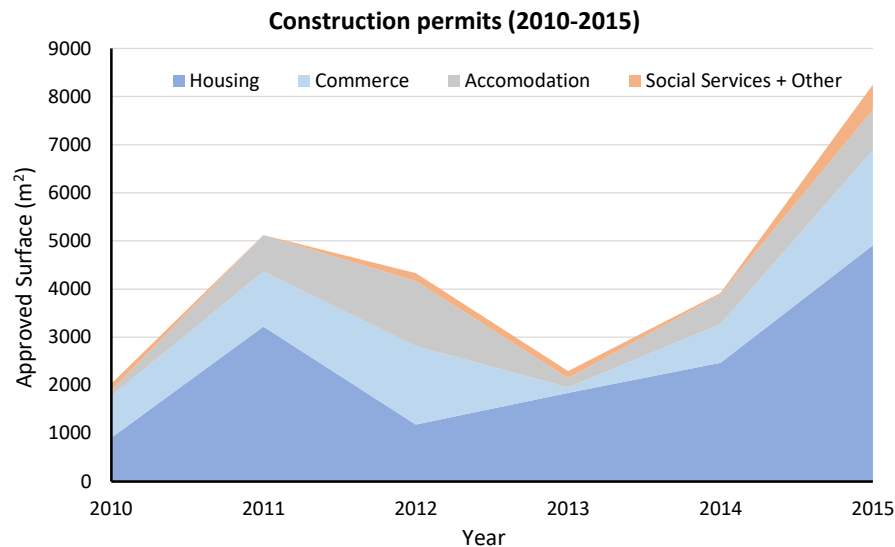


Figure 5.1 Built area recorded by construction permits issued from 2010 to 2015 (data from [16])

Almost all material and equipment for construction are imported to the Island from the continent. Aside from some quarried materials and raw eucalyptus logs for some construction applications, no other construction materials or equipment are produced locally. A disjunction between the amount of construction activity reflected in permit data and very low employment reflected in taxation data suggests that construction employment is primarily informal (unregistered). The spike in construction employment from 2008 to 2010, is perhaps attributable to a single large project for which labour was likely imported from mainland Chile (construction on the Hanga Roa hospital commenced in 2010).

5.7 References

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