

# A COMMUNITY PROFILE OF SARNIA ESTATE



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The CMRD Community Profiles display information about a broad range of factors from a specific location. The baseline information helps in researching, planning and analyzing material for studies that are in progress or development. The community data and illustrations are from both primary and secondary sources. Authorship is usually collective, but the principal writers are named. The papers are generally available in the English language, with some in the Sinhala and Tamil languages.

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Front cover photograph: *Sarnia Estate community drawing by Sakeena Alikhan (2022)*

## **A Community Profile of Sarnia Estate**

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## LOCATION AND PHYSICAL LAYOUT CHARACTERISTICS

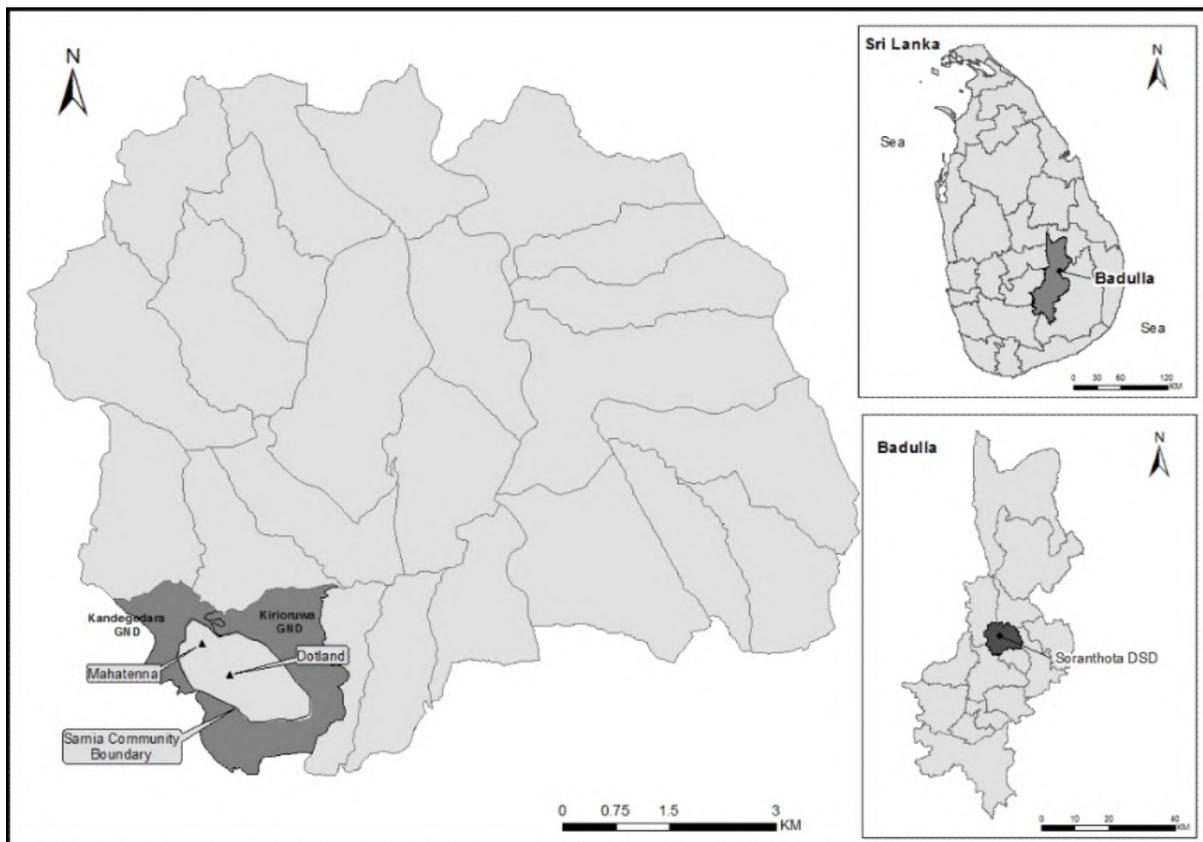


Figure 1 Sarnia Community

Sarnia Estate, owned by the Malwatte Valley Plantation PLC, is located in the Soranathota Divisional Secretariat Division (DSD) of the Badulla District of Sri Lanka. The five divisions of the estate are Mahatenna, Dotland, Sarnia Upper Division, Pladier, and Keenakela. From among these, the Mahatenna and Dotland divisions were chosen for the case study. These two settlements are located close to each other and adjacent to tea estates (see figure 1). Mahatenna is located at 7°0'42.66" North Latitude and 81°1'6.87" East Longitude. Dotland is located at 7°0'40.63" North Latitude and 81°1'18.62" East Longitude. These two divisions are divided into two Grama Niladhari Divisions (GND): Mahatenna is in the Kandegedara GND, and Dotland is in the Kirioruwa GND. From now on, these two regions shall be referred to as the "Sarnia community".

## 1.1 Physical Layout

Sarnia is located at an elevation of 950 to 1100 metres above sea level. It has an annual precipitation of 1723mm and an average temperature of 22.3oC. Tea plants surround the Sarnia settlements, which are surrounded by valleys and mountains. It covers around 165 hectares of land and has a population density of 12.45 persons per hectare.

## 1.2 Housing structure

There are three types of housing structures in the community: single houses, twin cottages, and line houses. Each dwelling category has its own set of characteristics. A single house, for example, is an individual house erected on the estate's grounds. During the construction of the house, occupants only received material assistance (roof, cement, etc.). In addition, thirty-two individual dwellings were built in the year 2019 under the Indian Housing Program. Those residences are nearly complete, but not yet occupied. Moreover, these homes were constructed on a seven-perch plot of land. According to a responder (39 years old, male, teacher) estate employees without a home were given priority in the beneficiary selection process. (see figure 2).



*Figure 2 Indian housing scheme*

The twin cottage is two houses sharing one wall. The line houses, which are also called row houses, were built by the British, each unit consisting of an approximately 12' x10'x9' opening into a long verandah (see figure 3). Drainage, ventilation, and toilets were not given enough consideration during the line room building. The lack of adequate drainage contributed to an unhealthy environment surrounding the employees' line rooms. Nowadays, households are allowed to change the interior structure of their houses, but are not permitted to expand them outside. However, despite this, some households extend their homes into the front and back yards at their own expense. The people do not have legal ownership (deeds) of any of

the houses described above. According to the Plantation Housing Development Trust (PHDT) (2020) statistics, the total number of single dwellings is 114, twin cottage type 68, and line house units 255.



*Figure 3 The housing structures in the Sarnia community*

## 2

# HISTORY OF THE NEIGHBOURHOOD

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## 2.1 Origin of the allottees

The Sarnia Estate was established, in 1885, by a Scottish company that brought labourers from India. Murugan, 72, is a resident of this estate community. He states that his father was a migrant labourer who came from India and settled on the estate. People are still living in the 'line' houses constructed in the colonial period. Besides the Indian migrants, 20 to 25 families from Galaha in the Kandy district were brought and settled in the estate by the management in 1978. Some of these families extended their houses with the remittances they receive from their family members who work in other cities, particularly Colombo. Nevertheless, the land and homes are still under the estate management and people do not have legal documents to claim ownership. Due to the absence of tenure, tensions occur between the people and the estate management when people attempt to renovate or extend their line houses.

## 3

# DEMOGRAPHIC INFORMATION

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## 3.1 Demographic profile

The Plantation Human Development Trust (PHDT) estimates that the overall population of the Sarnia community is 2061 persons in 2020. Male and female representation is 48% and 52%, respectively. The majority of people are Indian Tamils, who account for 98.7% of the total population. Sinhalese make up 0.9%, while Muslims and Christians make up 0.4%.

There are 619 families in the community, with 253 families working as tea pickers or in the factory (at least one member of the family), while 363 families are not employed on the estate. The remaining three families are classified as staff families, which means that at least one family member works as a staff member, such as a field officer or an accountant.

The ages of the people are divided as young dependents (0-14 years) 28.1%, youth and middle-aged (15-59 years) 57.7%, and older dependents (age 60 and above) 14.2%. Amongst the five years and above population, the majority or 41.9 obtained a secondary education, 34.5% received primary education, and 8.9% did not, and fell into the 'no schooling' category (Department of Census and Statistics Sri Lanka, 2012).

## 4

### SERVICE DELIVERY

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#### 4.1 Water

Natural springs are the community's principal source of water. They access water in a variety of ways: for example, one segment of the community uses their personal well (see figure 4), which is located within their enclosure, although there are only a handful of such wells. Other members of the community collect water from a public well near their main kovil, store it in a tank, and distribute it to homes via tap lines (see figure 5). Most residents draw water straight from the spring using tubes connected to their homes. They use the water for both drinking and washing.



Figure 4 Two types of wells in Dockland

***“Water is a highly needed service for the estate community. Due to the insufficient supply from the natural springs, groups of people from the Mahatenna division arranged another water supply from a well belonging to the Hindu kovli. Water is pumped by a motor and distributed to public taps in the community. Each family gives 300 rupees per month to the kovil for this service. The Sarnia estate and surrounding areas have rich water resources. Insufficient management of the water is the key reason for water scarcity in the community.”***

(Zoom interview – Sarnia)

Some respondents (focus group discussion) stated that the water in both settlements is unclean. The spring water can get contaminated by animal manure at the source. Furthermore, some people drink from open wells, which is unhealthy.



Water supply from the estate management (spring)

Water supply from the kovil well



Figure 5 Water distribution

## 4.2 Sanitation

### 4.2.1 Toilet

According to the census data (2012), all households in the community have toilet facilities. The primary toilet type used is 'water seal and connected to a septic tank' and 97.6% of households used these types of toilets. Some people built the toilet on their own and some people received the toilet from the Estate Welfare Trust and the National Water Supply and Drainage Board (NWSDB).

### 4.2.2 Drainage

Both the Mahatenna and Dockland settlements do not have a proper drainage system. Besides, respondents mentioned that due to the physical landscape, the surface water runs off without storage. Some line sections also have open drainages which overflow during the rainy season. In such situations, the waste blocks these drainages and causes a bad smell.

## 4.3 Energy

### 4.3.1 Electricity

The primary source of lighting is electricity, with 90.9 households using electricity supply from the national electricity networks and 9.1% using kerosene lamps for light. Generally, a six-member family spend around 900 rupees per month on electricity expenses (2021).

### 4.3.2 Cooking fuel

About 95.8% of households use firewood as the primary source of cooking fuel. They collect firewood from their surrounding neighbourhood free of charge. The remaining 4.2% of households use gas as a source for cooking. Nevertheless, nowadays around 25% of households have gas and use it on rainy days and in colder months.

## 4.4 Transportation

Kandededara is the nearest mini town for the Sarnia community. Although some groceries are available in the settlements, people use Kandededara for monthly bulk purchases on salary day. This town is located 1 to 2 kilometres from both Mahatenna and Dockland. People use diverse transport modes like walking or using a motorcycle or three-wheeler to reach the town.

The next town where people can get banking-related services is Badulla. Bus services are available via two routes. One service operates through Hali Ela and it takes around one hour to reach Badulla (15 kilometres). The bus fare for this route from the settlement is 60 rupees one-way (2021). People can get to Badulla town in 20 minutes via this route if they use their vehicle. The other route, which take 30 minutes to reach Badulla (10 kilometres), is via Hulugolla. It costs 50 rupees one way and people prefer this route as it has a better bus service (2021). It takes only 15 minutes to get to Badulla via this route.

People have to walk 100 to 500 metres from the settlements to get the bus. When they carry weight, they take three-wheelers from Kandegedara town. Three-wheeler fares vary depending on the distance to the settlement and the condition of the roads. Generally, Mahatenna people spend 100 to 150 rupees and Dockland people pay 150 to 250 rupees from Kandegedara to their settlements (2021).

#### 4.5 Communication

Most of the people in the community use the mobile phone as their primary communication mode. The coverage strength and quality depend on the geographical location of the house. Among the study respondents, most of the people connected to a telephone conversation and zoom meetings without significant difficulties. Dialog and Airtel are the widely used services in Sarnia. People, particularly youngsters, use networking for internet browsing, Facebook and WhatsApp. Generally, a youth spent 500 to 600 rupees per month for voice and data access (2021).

Most households have televisions. Some use antennas to watch local channels only, while some households have disk TV services provided by the Dialog Company. People spent 5000 rupees as an initial payment to access this facility and the monthly charge varies between 500 to 850 rupees. People can enjoy many channels from this service and they prefer Tamil films and dramas broadcasted on Indian channels.

## REFERENCES

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Department of Census and Statistics Sri Lanka (2012). *Census of Population and Housing 2011*. [online] www.statistics.gov.lk. Available at: <http://www.statistics.gov.lk/PopHouSat/CPH2011/index.php?fileName=Activities/TentativelistofPublications> [Accessed 2 May 2021].

Plantation Human Development Trust (2019). Foundation stone laying ceremony at Sarnia Estate [online]. Plantation Human Development Trust. Available at: <https://phdt.org/2017/index.php/news/foundation-stone-laid-at-sarnia-estate/> [Accessed 4 Apr. 2022].

Plantation Human Development Trust (2020). Statistical Report, The Plantation Human Development Trust.