

FS on introduction waste management technology (2021)

Project name : “Feasibility survey for establishing local resource-circulation business for cashew-nuts industry in Cambodia”

1.FS implementation company

(Project developer)

TOP PLANNING JAPAN CO., LTD (TPJ)

TPJC Co., Ltd. (TPJC/TPJ in Cambodia)

(Partner Companies/Association)

Cashew nut Association of Cambodia (CAC)

Iwatani Corporation (purchase of oil and shell residue)

2.Country and Waste types

(Year for FS implementation)

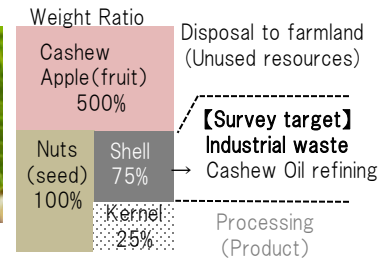
2021(Reiwa 3)

(Country)

Kingdom of Cambodia

(Waste types)

“Shells” disposed of as processing residue in cashew nut processing plants



3. Planned project outline

(Technology)

Technology for refining cashew oil from the shell

(Size of installation)

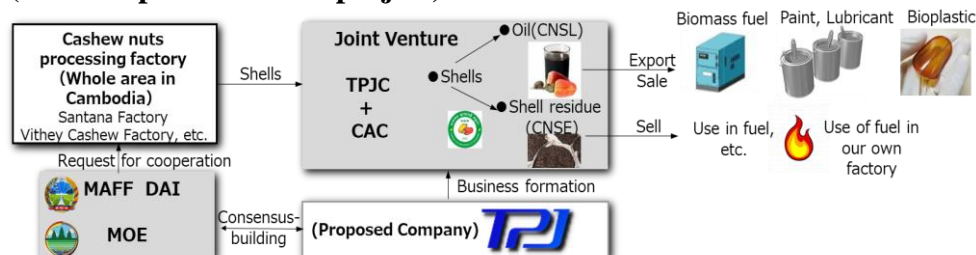
Cashew nut processing residue (shell):21t/day

Refined cashew nut oil:4.2t/day

(Project implementation formation)

Our plan is to establish a joint venture company with TPJC and CAC for the business development of waste treatment and biomass utilization from cashew nut processing plants throughout Cambodia. In addition, we will develop a collaboration system with Ministry of Agriculture Forestry and Fisheries/ Department of Agro Industry (MAFF/DAI) and the Ministry of Environment (MOE) to promote and expand the business horizontally.

(General picture of this project)



(Project description)

This project is to utilize unused resources and wastes generated from cashew nut processing. In this project, we collect processing residues (shells) from our own and neighboring processing plants, refine and sell the cashew oil. After refining, the shell residue will be used as biomass fuel and be sold. We collect and process the processing residues from the processing factories, which are rapidly increasing in the Cambodia, as a joint business with Cashew nut Association of Cambodia(CAC), and aim to create a cashew venous industry which is untapped in Cambodia.

(Impact of reducing environmental burden)

We shall work on the disposal of waste generated by our processing plants. We will collect 5,250 tons/year of shells of processing residues from factories in Cambodia (including our own factory) and refine 1,050 tons/year of cashew oil for export as biomass fuel and resources. Cashew oil can be used to make paints, films, sheets, and resins without solvents, thus promoting appropriate disposal and reducing environmental impact. In terms of greenhouse gas emission reduction, it is expected to reduce 2444.5t-CO2/year assuming the alternative of refining and burning fossil fuels with biomass fuel of cashew nut oil (CNSL) and shell (CNSE).