

## **Seashell processing: An emerging industry in Kinniya divisional secretariat division of Trincomalee district**

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### **Introduction**

The seashell processing industry functions by grinding the seashells for production of lime for building construction purposes and for making poultry feed (Fisheries Year Book, 2007). The low income people in the Kinniya Divisional Secretariat (DS) division collect seashells to earn money for their daily living. The people who are engaged in this industry earn sufficient income (Sunday Observer, 2012). Seashell deposits are available in Kakkamunai village of Kinniya DS division, which is located closer to the mouth of Thampalagamam Bay, which is enriched with bivalves. Shell mining has taken place for last three decades in a sustainable manner. There is a high demand for shells from the poultry feed industry, thus generating a good income from this activity (Minerals Year Book, 2007). In this context a survey was carried out to study this emerging industry in Kinniya DS division of Trincomalee district.

### **Methodology**

This study was carried out during the months of April and May, 2014 in ten villages in Kinniya DS division. Using random sampling procedure, a total of 90 seashell processors were selected, which includes collectors, grinders, transporters, loaders and mill owners and a structured interview schedule was used to collect the information through personal interview at their home and seashell processing mills. Collected data were analyzed using the SPSS package.

### **Result and Discussion**

Personal and socio-economic characteristics of seashell processors in Kinniya DS division of Trincomalee district revealed that all the seashell processors (100%) were males. Young age and middle age categories were same (40%). 80% were under primary level of education. Majority (68.9%) of the respondents depended mainly on seashell industry. More than half (54.5%) of seashell processors belonged to medium income group of Rs.20, 000 to Rs. 40,000 per month. Majority of respondents (87.8%) were part time workers. Majority (85.6%) of respondents had 5 to 10 years experience in seashell processing. Only 11.1% respondents had organizational membership; because the mill owners only had the membership with social organizations. The seashell processors have not participated in any extension activity related to seashell processing.

All the respondents (100%) indicated that seashell collection was the most difficult work in seashell processing. Among the people who involved in seashell collection, most of them obtained medium income of Rs.1000 - Rs.1500 per day. Most of people who involved in seashell grinding obtained high income (Rs. 420 per bag) from seashell grinding per day. Majority (91.1%) of the respondents involved in seashell industry were rural people. All the respondents (100%) were in the view that the overall business condition of the industry is good. All (100%) of respondents reported that the ground seashell bags were marketed directly to the consumers. The demand for ground seashells is high in Kurunagale district. Kandy, Matala, Puttalam, Kalutara, Colombo, Avissawella and Galle are the other places getting ground seashells from Kinniya mills.

### Economic status of the respondent before and after joining with seashell industry

Table 01: Distribution of respondents according to their economic status before and after working in seashell industry

Category	Before working in the seashell industry (%)	After working in the seashell industry (%)
Upper class	0.00	14.5
Upper middle class	02.2	61.1
Lower middle class	31.1	23.3
Poor	54.5	01.1
Very poor	12.2	00.0

Source: Field survey, 2014

Table 01 provides the comparison of the distribution of respondents according to their economic status before and after working in the seashell processing industry. The results indicate that majority (54.5%) of the respondents were under poor category of economic status before working in the seashell industry followed by lower middle class (31.1%), very poor (12.2%) and upper middle class (2.2%) respectively. There was no one under upper class category among the respondents before working in this seashell industry.

Table 01 also indicates that majority (61.1%) of the respondents were under upper middle class category after working in this seashell industry followed by lower middle class (23.3%), upper class (14.5%) and poor (1.1%) respectively. It is good to note that there was no one under very poor category after joining with the seashell industry.

### Socio-economic conditions of the respondents before and after working in seashell industry

Before the establishment of this industry, employment, income and the living standard of the respondents were in low level. But, after the establishment of this seashell industry the employment, income, living standard and the overall socio-economic status were improved for all categories of respondents (Owners, Collectors, Grinding persons, Loading persons and Transporters). This leads to reduction in poverty level of the people who were involved with seashell industry.

The shell mining activities should be maintained at a sustainable level to prevent the environmental effects and future negative impacts. For that Natural Aquatic Resources and Development Agency (NARA) has given a maximum limit to the seashell processors. They cannot exceed the limit of 20,000 packs of shells per month. The Government has made this restriction to protect the natural resources. Exceeding this limit will cause severe environmental problems by the lapse of time. And these resources should be protected for the next generation. Or else this industry will have a natural death.

### Conclusions

From the study conducted it can be concluded that all the seashell processors involved in this industry were males and majority of respondents were under primary level of education. More than half of seashell processors belonged to medium income group. Majority of respondents had 5 to 10 years experience in seashell processing. The seashell processors were not participated in any

extension activity related to seashell processing. Majority of respondents involved in seashell industry were rural people and majority of them were poor before working in this seashell industry and presently majority were under upper middle class. The living standard and the overall socio-economic status of people were low before the establishment of this seashell industry, but after the establishment of this seashell industry those conditions were improved. And the poverty level was decreased after the establishment of this seashell industry. Over seashell mining leads to environmental adverse effects. Therefore, to prevent those effects shell mining should be maintained at a sustainable level.

## **References**

Minerals Yearbook of Sri Lanka (2007), Geological Survey and Mines Bureau, Sri Lanka

Sunday Observer (2014). Seashell processing underway in Kinniya. Retrieved on February 26, 2014, from the World Wide Web: [http:// www.sundayobserver.lk](http://www.sundayobserver.lk)