Executive Summary

1. Non-Aligned Movement Centre for South-South Technical Cooperation and International Coconut Community offered training programme on *nata de coco* to member countries in Africa, Asia, Latin America and Caribbean and the Pacific. Through the training, participants gained knowledge and skills regarding the processing and marketing of *nata de coco*.

2. The training programme presented two resource persons from Ministry of Agriculture of Indonesia and PT KARA Santan Pertama. PT KARA Santan Pertama delivered presentation on marketing strategy and technology for cutting machines in many forms that are attentive to customers’ demands.

3. Participants were greatly impressed with complete knowledge of the product, partnership opportunity in *nata de coco* production and PT KARA Santan Pertama’s marketing strategy.

INTRODUCTION

To follow up the Memorandum of Understanding and Agreement on Cooperation on Coconut Development, Non-Aligned Movement Centre for South-South Technical Cooperation (NAM CSSTC) and International Coconut Community (ICC) offered training programme on *nata de coco* to member countries in Africa, Asia, Latin America and the Caribbean, and the
Pacific. The training participants gained knowledge and skills regarding the processing and marketing of nata de coco. Nata de coco is a gel-shaped coconut product rich in fibre. Nata de coco is one of the products exported by developing countries, particularly by Southeast Asian countries.

LOCATION AND TIME

The training was conducted online on 8th September, 2020 via the Zoom Meeting platform. The training agenda includes presentations by resource persons and talks between participants and resource persons led by Mr Vincent Bernard Johnson, moderator from the Coconut Genetic Resources Network (COGENT).

TRAINING AGENDA

Appendix 1 demonstrates the training agenda.

RESULTS AND DISCUSSIONS

- 15 – 20 days is the generally accepted incubation period for nata de coco processing. However, production of nata de coco within 8 days is possible, depending on the conditions of fermentation and the bacterial levels on the coconut water. There are several differences in the incubation cycle.
- When it comes to nata de coco production, cutting with a knife is normally done. PT KARA Santan Pertama also has a technology for cutting machines, not just in the form of squares but also small long pieces, since some customers are interested in nata de coco soup.
- Small size equipment also available for small and medium-sized businesses, since PT KARA Santan Pertama works with small-scale farmers as well. The production capacity is 30 tons. The equipment is not complex, easy to use and effective. Finding it in any country is very easy.
- The shelf life of nata de coco products depends on the way in which they are packaged. Raw nata de coco’s shelf life is only a few days. However, if the producers add sugar, the shelf life can increase by up to 18 months.
• The processes to enhance shelf-life by pasteurising the product is by adding acid, steaming and packaging.
• The packaging of nata de coco in general depends on the target market. The company should be able to identify customers’ preferences on this matter.
• Regarding PT KARA Santan Pertama’s partnership with small industries, quality control and hygiene must comply with KARA’s requirements before delivering raw materials or coconut sheets. A fact sheet on quality control of PT KARA Santan Pertama will be issued through ICC.
• There is no nutritional reduction of nata de coco processing by heating process. Producers just need to ensure that every equipment is clean. The nutrients are preserved as long as the equipment is clean. Furthermore, nata de coco only consists of water and cellulose. Thus, cellulose in nata de coco is not affected by the heating process. Instead, bacteria were eliminated during the process.
• The important nutritional value of nata de coco is its fiber source function. Nata de coco has cellulose and water. If cellulose enters the digestion and meets bacteria in human stomach, it will produce fiber because it is impossible to synthesise. By supplying the brain with suggestions that the stomach is full, nata de coco can be used for diet programme since people can feel full without consuming calories.
• Despite nata de coco is served with sugar, however, it also contains fiber. This is what customers gain for their health. PT KARA Santan Pertama is also developing new products to reduce sugar levels. It also encourages consumers not to use syrup for the consumption of nata de coco.
• The way to consume nata de coco is to develop a nata de coco-based recipe. A cupcake nata de coco for instance, or nata de coco in long chunks, as a drink. Nata de coco can be used as a food ingredients, like pudding. Perhaps one day it can also be combined with alcoholic beverages.
EVALUATION

The assessment carried out with the participants showed:

- 67.9% of respondents reported receiving information about the training agenda before the start of training;
- 46.4% of respondents reported communication between participants were facilitated;
- 50% of respondents have indicated that the training is highly sensitive to participants’ needs;
- 71.4% of respondents said that the training led to the advancement of participants in terms of education, professional or personal skills;
- 64.3% of respondents reported the training content was well organised and easy to follow;
- 60.7% of respondents showed great interest until the end of the training;
- 67.9% of the respondents said that the resource persons understood the subjects they raised;
- 64.3% of respondents reported the resource persons were well-prepared;
- A total of 67.9% respondents reported that training delivery is closely linked to the goals to be achieved;
- 42.9% of the respondents reported ample time allocation;
- 46.4% of respondents identified effective management of the Zoom Meeting platform.

Participants Experience

In terms of experience, participants were greatly impressed with complete knowledge of the product, partnership opportunity in *nata de coco* production and PT KARA Santan Pertama’s marketing strategy. Moreover, participants reflected how the Q&A session between resource persons and participants was incredibly interactive.
Suggestion for Improvements

In terms of suggestions for improvements in training efficiency, the participants indicated that the time management should be improved, especially by extending the length of the Q&A session. In addition, the participants also requested massive publication on future training sessions.

Learning Material that is Intended to Use

Participants said that they would forward the material they received from the training to their peers and students. Besides, they also wanted to explore different varieties of coconut products for commercial interests. Participants will also help to promote nata de coco as a healthy food.

Suggested Topic for the Next Training

A coconut milk processing training was recommended by 71.4% of the respondents. The other respondents suggested training in coconut sugar processing, coconut oil production and coconut quality control.

CONCLUSION

In general, it can be concluded that approximately 68.8% of respondents said they were very pleased with the training. Participants were greatly impressed with complete knowledge of the product, partnership opportunity in nata de coco production and PT KARA Santan Pertama’s marketing strategy.

***
## AGENDA

**Online Training Program**

**“Processing and Marketing of Nata de Coco”**

**TIME SCHEDULE**

Tuesday, September 8th 2020 | 14.30 Hrs. - 16.30 Hrs. (ICT)

<table>
<thead>
<tr>
<th>EVENT</th>
<th>PERSON</th>
<th>TIME</th>
</tr>
</thead>
</table>
| Introduction of Program | Mr. Vincent Johnson  
(Interim COGENET Coordinator, ICC) | 2 Minutes |
| Video Presentation: ICC Profile | Mr. Aliit Pirmansah  
(Market & Statistics Officer, ICC) | 10 Minutes |
| Invitation for the Welcome Speech | Mr. Vincent Johnson  
(Interim COGENET Coordinator, ICC) | 2 Minutes |
| Welcome Speech | Dr. Jeffina C. Alouw  
(Executive Director, ICC) | 7 Minutes |
| Invitation for the Opening Remarks | Mr. Vincent Johnson  
(Interim COGENET Coordinator, ICC) | 2 Minutes |
| Opening Remarks | H.E. Ambassador Ronny Prasetyo Yuliantoro  
(Director, NAM-CSSTC) | 7 Minutes |
| Presentation: “Processing of Nata de Coco” | Jerry Wungkana  
(Researcher, Indonesian Palm Crops Research Institute, AARD, Ministry of Agriculture) | 25 Minutes |
| Video Demonstration: “Processing of Nata de Coco” | Mr. Aliit Pirmansah  
(Market & Statistics Officer, ICC) | 10 Minutes |
| Presentation: “Marketing of Nata de Coco” | Martin Jimi  
(Director, PT. Kais Santan Pertama) | 25 Minutes |
| Discussion | Moderator & Participants | 15 Minutes |
| Closing Summary | Mr. Vincent Johnson  
(Interim COGENET Coordinator, ICC) | 5 Minutes |
PHOTO DOCUMENTATION
SURVEY STATS

The curriculum / agenda was clearly specified.

The organisers facilitated contact between participants.
The training was attentive to participants' needs.

The training contributes to my education, professional and/or personal growth.
The contents were well arranged and easy to follow.

The training kept me engaged and interested.

The trainers were familiar with the topics of training.
The trainers were well prepared.

The activities related to the goals of training.

The training time allocation was enough.
The management of the zoom meeting was convenient.

What coconut training topic(s) are you looking for in the future?

- Coconut sugar: (46.4%)
- Quality control for processed coconut: (42.8%)
- Coconut milk powder: (64.3%)
- Coconut oil production: (60.7%)
- Processing of VCO products / by products: (3.6%)
- Coconut flour: (3.6%)
- Coconut Scuba & soap: (3.6%)
"STAY HEALTHY AND PRODUCTIVE DURING COVID-19 PANDEMIC" ONLINE TRAINING SERIES AND WEBINAR PROJECT 2020

LIST OF PARTICIPANTS’ COUNTRY OF ORIGIN

IN THE IMPLEMENTATION OF THE "ONLINE TRAINING ON PROCESSING AND MARKETING OF NATA DE COCO" 2020, EXTENSION OFFICERS, RESEARCHERS, COCONUT PRODUCERS AND INDIVIDUALS FROM THE FOLLOWING COUNTRIES REGISTERED:

<table>
<thead>
<tr>
<th>NO.</th>
<th>COUNTRY (IN ALPHABETICAL ORDER)</th>
<th>NUMBER OF PERSON(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>FIJI</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>GHANA</td>
<td>1</td>
</tr>
<tr>
<td>3.</td>
<td>GUYANA</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>INDIA</td>
<td>54</td>
</tr>
<tr>
<td>5.</td>
<td>INDONESIA</td>
<td>62</td>
</tr>
<tr>
<td>6.</td>
<td>JAMAICA</td>
<td>1</td>
</tr>
<tr>
<td>7.</td>
<td>KENYA</td>
<td>1</td>
</tr>
<tr>
<td>8.</td>
<td>MALAYSIA</td>
<td>2</td>
</tr>
<tr>
<td>9.</td>
<td>FEDERATED STATES OF MICRONESIA</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td>MOZAMBIQUE</td>
<td>1</td>
</tr>
<tr>
<td>11.</td>
<td>PAPUA NEW GUINEA</td>
<td>9</td>
</tr>
<tr>
<td>12.</td>
<td>PHILIPPINES</td>
<td>31</td>
</tr>
<tr>
<td>13.</td>
<td>TANZANIA</td>
<td>21</td>
</tr>
<tr>
<td>14.</td>
<td>THAILAND</td>
<td>3</td>
</tr>
<tr>
<td>15.</td>
<td>TONGA</td>
<td>1</td>
</tr>
<tr>
<td>16.</td>
<td>VANUATU</td>
<td>1</td>
</tr>
<tr>
<td>17.</td>
<td>BOLIVARIAN REPUBLIC OF VENEZUELA</td>
<td>1</td>
</tr>
</tbody>
</table>

PARTICIPANTS’ BACKGROUND

<table>
<thead>
<tr>
<th>NO.</th>
<th>BACKGROUND</th>
<th>NUMBER OF PERSON(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>GOVERNMENTAL</td>
<td>14</td>
</tr>
<tr>
<td>2.</td>
<td>HIGHER EDUCATION</td>
<td>24</td>
</tr>
<tr>
<td>3.</td>
<td>PRIVATE SECTORS, INTERGOVERNMENTAL ORGANISATIONS, OTHERS</td>
<td>161</td>
</tr>
</tbody>
</table>