# The Approach to Reduce the Production Cost of Cassava and Develop a Network of Farmers Who Produce Cassava NaKhon Ratchasima Province

Settawat chokwarakul Public Administration Program, Faculty of Humanities and Social Sciences, Nakhon Ratchasima Rajabhat University, Thailand



#### **ABSTRACT**

The purpose of this research study. To determine the cost of cassava production. To support the integration network. And to increase marketing for cassava products. The farmers who produce cassava province. The study area is due Khon Buri district, a district that has grown cassava in the Nakhon Ratchasima province. Studied by those involved with the production, promotion and development of the farmers who produce cassava. The process of qualitative research

The results showed that 1) most farmers that cassava is cultivated and maintained however. So planting cassava so just plow tillage. Forest, the Wildcats were led Then fled away, Until the maturity was sold to dig out the roots. Soil fertility, drought, diseases, insects, weeds are not a problem or not. Farmers have a higher cost of production of cassava. To reduce the cost of producing cassava, farmers will have to learn 5 Technology of the Ministry of Agriculture include (1) soil management (2) Management of varieties that fit the space (3) management of manure on the soil (4) The water drops (5) Crop Protection, 2) a group of farmers with the management group of nine people including the president, vice president, secretary, treasurer and director fifth member not less than 30 nor more than 50 people among farmers. Monthly meetings To monitor the implementation and planning of operations. The farmers have formed cooperatives Khonburi bundles of cassava with Sanguan Wongse Industries Co., Ltd. reserves and current production of cassava in the province is not enough demand. The operator had gathered to find a way to increase the yield of cassava farmers. By focusing on the production model of manufacturing efficiency. The joint upstream, midstream and downstream from 3) Farmers should be sold as fresh cassava, cassava flour line with garage / yard because it will have a higher price. And can also be sold as a raw material for the ethanol industry. The one that should be promoted as a marketing channel. It is a renewable crude oil imported from foreign exchange savings for the country and promote sustainable income to farmers.

Keywords: Cassava, Network, Farmers, Nakhon Ratchasima

## The significance and origin of the problem.

National development plan, the National economic and social development no. 1 to no. 8 for the past 40 years, a process that focuses on the technical aspects of development. Not the

holistic development Most of the development by imitating the West. In terms of economic development, large or macro. Community-oriented consumerism. Mounting comfort others rely on the intelligence behind the prefix. Politically, the vote buying. The development regardless of consistency and in accordance with local requirements. Such problems are more complex day by day. Intense and difficult to resolve by no one. Or any part thereof Public or private sector relies solely on public sector or civil society work together to find solutions to the national crisis is a holistic development. Focus on the work involved. The Exchange And social learning leads to knowledge management by joint action with the state and state examinations. Community organizations Networks are important tools to drive valuable to developers. Current government policy is to support the business community. Arising from the introduction of local resources and knowledge. Used to benefit the community. The crops The Northeast Cassava is an important crop plants that are important for both agricultural and industrial. Namely growers can do. It starch factory yard operators, exporters and cassava starch. The benefit to the overall economy. Nakhon Ratchasima province where most of cassava in the country by the year 2557 with an area of 1,978,598 hectares planted 25 percent of the total cultivated area in the country. The harvested area is 1,971,765 ha yield 6,236,613 tons of yield per acre harvested 3,520 kg / ha (Office of Agriculture Nakhon Ratchasima Province, 2557), which currently grow cassava. The area planted is expected to grow even more. The key issue in the Nakhon Ratchasima province, including farmers affected by drought. The not fully grown Lack of fertile soil Because the cassava steadily each year, making the soil structure and compaction of the soil tightly. Cassava cannot grow fully. Low yield Farmers also lack the knowledge to analyze the soil. Such problems resulting from cassava output is insufficient to meet the needs of the market. The reason and importance of such problems. The researchers were interested to study ways to develop and enhance products network of cassava farmers who produce cassava Nakhon Ratchasima Province. The research aims to develop a network of farmers who produce cassava Nakhon Ratchasima Province. The products leverage a variety. To add value to products from cassava Nakhon Ratchasiam Province. It creates extra income for local farmers. The enormous amount of money into the country. To the prosperity and stability of the food industry.

### Research objectives.

- 1. To reduce the production cost of cassava farmers who produce cassava Nakhon Ratchasima Province.
  - 2. To support the integration creating a network of farmers who produce cassava.
  - 3. To add the channel to market for cassava products.

# Benefits of research.

1. Farmers can reduce the production cost of cassava.

- 2. Promote the integration creating a network of farmers who produce cassava.
- 3. To add the channel to market for cassava products. The farmers who produce cassava province.

# Methodology.

Forms and methods of this study used qualitative research methods. Primarily to obtain information on depth accuracy and reliability. Details are below.

- 1. This research The researchers used in the study area by selecting a specific study area was selected because it is a district in Nakhon Ratchasima, Khon Buri district with most cassava cultivation. The area is 189,267 hectares of cassava for use as a pilot study to find ways to reduce production costs and develop a network of farmers who produce cassava province.
- 2.Population and sample To determine sample population of this study, the researchers used a sampling method. To get the experts directly involved in the production and development of a network of farmers who produce cassava province All 18 people.
  - 2.1 Methodology Qualitative Research.

Step 1: Research sources used.

Step 2: How to Study.

Step 3: Tools used in research.

Step 4 : Collect the data.

Step 5 : analyzing the data.

2.2 Data Analysis. How to use analytical induction. By interpreting the conclusion of academic papers related information. From in-depth interviews Noting participatory and non-participatory. And group chat The results presented in accordance with the guidelines of qualitative research, including analysis of descriptive information on the phenomenon. In order to seek the findings from the research, which led to the reduction of production costs and develop a network of farmers who produce cassava Nakhon Ratchasima Province next.

#### Research result.

1) Farmers who produce cassava mainly seen. Cassava is planted and how to take care of it. So planting cassava so just plow tillage. Forest, the Wildcats were led Then fled away, Until the maturity was sold to dig out the roots. The abundance of soil insects, diseases, weeds are

not a problem or not. Or even drought, however, it was not an issue as well. All this is Cassava farmers follow the practices of the people. As a result, farmers have cassava production costs high. Ways to reduce the cost of cassava production. Farmers must learn the five technologies to improve productivity and reduce the production of cassava, the Ministry of Agriculture include (1) soil management (2) Management of varieties that fit the space (3) management of manure on the soil (4) The water drops (5) crop protection.

2) The farmers who produce cassava in each group. The management group has appointed a committee of nine people including the president, vice president, secretary, treasurer and five other board members who are not less than 30 nor more than 50 people who register in that group. Must be certified by the original members exceeded half. Must be domiciled address Including arable land in the area of the group. Farmers have set up meetings every month. To monitor the implementation and operational planning group. The main aim of the group is to increase farmers' bargaining power with middlemen cassava. Initially yard cassava Buy cassava in the package price. No measuring flour collections The scales are cheating Farmers face problems selling even more losses. Farmers have a discussion that should be grouped together to form cooperatives to reduce exploitation. The latest consultation from the authorities Provincial Cooperative Office in Nakhon Ratchasima. It has established cooperative Khonburi limited by trading with cassava. Wong Industrial Co., Ltd. All rights are as described below. Farmers who are members of cooperatives Khonburi limited can be weighed and cassava to sell the company reserves Wong Industrial Co., Ltd. has passed the measure directly on the dough percent. And weighed fresh cassava completed, the company will issue a scale farmers. Back to the car can hit up the money Khonburi Cooperative Ltd. The company immediately. How to use the cooperative's bank account directly to this cooperative. The processing fee of 3 percent of the total purchase all fresh roots. The farmers are members of cooperatives have a higher price tag than the price five cents more per kilogram of flour mills and the car (the brakes), another 5 cents per kilogram. And year-end dividends received from farmers, agricultural cooperatives Khonburi limited. The operator of cassava in the province. Currently, there are 22 cassava starch Industry 120 cassava courtyard it across the province. Experiencing cassava within the province there is not enough demand. To solve the problem with buying potatoes from other provinces. The cost of the purchase of higher transport costs. The operator Gather to seek more cassava to the farmers who produce cassava province. By focusing on the production of bulk production. Are managed effectively. And coherence between manufacturers within the supply chain. The province has ordered the 2262/2553 dated July 13, 2553 appointed a working group to integrate the fields of agricultural economics, food, energy and industrial (years 2553-2556) by the Governor of Nakhon Ratchasima. The chairman of the working class Province Department of Industrial Promotion The Department of Industrial Promotion, which is sponsoring the establishment of six clusters of activity bundles. Passed a resolution to name "It's a cluster or Korat Tapioka Cluster (KOTAC)" official purposes KOTAC is urged stakeholders in the industry. The importance of integration as a business partner. Cooperation Information exchange Knowledge, experience Product development and innovation with the implementation of the

strategic direction and goals, as well as a clear action plan to build competitiveness in both domestic and international sustainable.

3) The farmers who produce cassava. There are no plans to develop a market for cassava. Most of the farmers sold fresh cassava is the main. It has a relatively low price compared with a cassava processing line. When the market mechanism as defined advantage in trade. Farmers should change their behavior cassava waste disposal. From the original model, which sold to a middleman in the distribution of the cassava root. It will not cost more than In order to add value to cassava farmers increase income. In the future, if farmers can increase yields of fresh cassava / ha. It will make farmers more income from privatization, as it lines up a lot. In addition, the researchers have found that the ethanol industry. The use of fresh cassava and cassava as raw material in the production line. Niche marketing is one that should encourage farmers who produce cassava yield sales. Because of government support for ethanol industry continues. It is a renewable crude oil imports from overseas. Save money and help the country's income to the farmers who produce cassava sustainable.

### Discussions.

1) Most farmers that cassava is cultivated and maintained however. So planting cassava so just plow tillage. Forest, the Wildcats were led Then fled away, Until the maturity was sold to dig out the roots. Soil fertility, drought, diseases, insects, weeds are not a problem or not. Farmers have a higher cost of production of cassava. To reduce the cost of producing cassava, farmers will have to learn 5 Technology of the Ministry of Agriculture include (1) soil management (2) Management of varieties that fit the space (3) management of manure on the soil (4) The water drops (5) Crop Protection. The results were consistent with Prapas Changlek and Sudprasong Suvannalert (2551) that observed in the plant to increase yield and starch content cassava to meet the energy to do the following: 1. Prepare the soil well. 2. Improve the soil. 3. planning to grow to suit the season. 4. cassava best strain. 5. Use of the best strain. 6. How to grow. 7. Spacing is correctly. 8. weeding. 9. increasing productivity by using chemical fertilizers. and 10. Dig harvest season to be in the right moment. 2) A group of farmers with the management group of nine people including the president, vice president, secretary, treasurer and director fifth member not less than 30 nor more than 50 people among farmers. Monthly meetings To monitor the implementation and planning of operations. The farmers have formed cooperatives Khonburi bundles of cassava with Sanguan Wongse Industries Co., Ltd. reserves and current production of cassava in the province is not enough demand. The operator had gathered to find a way to increase the yield of cassava farmers. By focusing on the production model of manufacturing efficiency. The joint upstream, midstream and downstream from. The results were consistent with Tawit Sudsakorn and Aumpon Nermai (2551). The research project linking supply chain networks cassava value. The study area is the KamphaengPhet Province. Can be summarized as follows: The value of cassava research network. The completion of the project within one year research yields a map. Strategy and business plan in the direction of improving the

operation of an agricultural cooperative that cares for its members and the greater community. The results of cassava cultivation under cooperative network. In order to reduce costs and increase yields. Which has expanded to other co-op members have a business network under cassava supply chain. Which can develop new marketing channels. The alliance brings together business productivity and drying cassava. The establishment and operation Learning Center cassava production. To reduce costs and increase vields. 3) Farmers should be sold as fresh cassava, cassava flour line with garage / yard because it will have a higher price. And can also be sold as a raw material for the ethanol industry. The one that should be promoted as a marketing channel. It is a renewable crude oil imported from foreign exchange savings for the country and promote sustainable income to farmers. The results were consistent with Nam kummuntree and faculty. (2558). The model for the development of clean cassava chip farmers. The results showed that 1) nearly two-thirds of farmers have knowledge of it produced fewer lines. Most never made it to the line. Experience in the production of cassava average 3.04 years for the production of cassava is the most revenues over the sale of cassava root. Sources acquire the knowledge to produce cassava most neighboring farmers were satisfied with the production of cassava on a large scale and three-quarters do to get the knowledge to produce its clean lines, 2) production models. It's the process for farmers to test two times, four times the rate review process improvements to the manufacturing process one time (the process is composed of clean lines. Preparing cassava and chop it to dry storage. The development of the production model's clean lines for farmers (2) a standard format that includes farmers who buy it, clean lines. Learning theory and process it, clean lines.

### Suggestion.

- 1. The process of promotion and transfer of technology for the production of cassava farmers.
- 2. Should a network of farmers to produce cassava clean.
- 3. Learn to network farmers to produce ethanol community.

#### REFERENCES

- Klanarong Srirod and faculty. (2542). The cassava processing and utilization. Publication of academic programs to alleviate the social impact of the economic crisis. Kasetsart University: Bangkok.
- Department of Provincial Administration. (2557). Basics province. Bangkok: Interior Ministry.
- \_\_\_\_\_ (2557). The registration. Bangkok: Bureau of Registration Administration, Department of the Interior.
- Department of Agriculture. (2557). Paper cassava. (No. 7/2557). Bangkok: Printing Department of Agriculture.

- Department of Agricultural Extension. (2557). The cassava. Bangkok: Printing Department of Agriculture Extension.
- Department of Agriculture Extension Nakhon Ratchasima Province. (2557). Report statistics planting cassava Nakhon Ratchasima Province. Printing Department of Agriculture Extension: Bangkok.
- Kobkiat Pisanjaroen and faculty. (2554). The soil and water management, planting cassava. Field Crops Research Institute.
- Kobkiat Pisanjaroen. (2554). The management of soil and fertilizer to increase cassava production. Document Subtitles management of land, water and fertilizer to increase cassava production. In testing it Cassava clean. July 12, 2554. As of Nakhon Agricultural Research and Development Center.
- Talerngsak Weerawut and faculty. (2554). Manual propagation to prepare it and clean the area. Bangkok: Department of Agriculture.
- Nam kummuntree and faculty. (2558). The model for the development of clean cassava chip farmers. Journal of Nakhon Phanom University; Year 5 No. 1: January April 2558.
- Prapas Changlek and Sudprasong Suvannalert. (2551). The increase cassava production of renewable energy plants. M.p.p.: M.p.t.
- Prayat Manoprasao. (2556). Process-driven network of community enterprise as a tool for agricultural extension officers. Lamphun. Journal of Agricultural Core. 41: 17-26 (2556).
- Tawit Sudsakorn and Aumpon Nermai (2551). Research linking supply chain networks cassava value. Office Research Fund (TRF).
- Warinton Tanadka. (2547). Investment Analysis of Clean Cassava Production: A Case Study of Nakhon Ratchasima Province Soeng Sang. Available. Master of Science (Economics Agricultural) Kasetsart University. Graduate School.