

# A CONCEPT NOTE ON AMRUTHAM NUTRIMIX

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## Concept Note on Amrutham Nutrimix

### Executive Summary-

Amrutham Nutrimix is a food supplement for children prepared by small units, consisting of NHG members, prevailing in every district of Kerala with the patronage and guidance of Kudumbashree. Such kind of initiative, exclusively involving women, has been pioneer in the field of rural development, financial inclusion and most importantly in the battle against malnutrition. Amrutham Nutrimix as a Take Home Ration (THR) gets supplied to Anganwadis by the units, from where the children get for free. On the other hand, the units get paid by the ICDS supervisor through Panchayat. Nutrimix's popularity has increased over the years for the standardised quality and the unit's capability to meet the demand with adequate supply under all circumstances.

### Table of Contents-

CONTENT	Page No.
1. Introduction	1,2
2. Evolution	2,3
3. Timeline	4
4. Product profile	4,5
5. Units	6,7,8
6. Consortium	9
7. CPCRI	9,10
8. Packaging and Distribution	10
9. Quality Control and Monitoring	10,11
10. Impact	11
11. SWOT Analysis	12
12. Challenges and Issues	12,13
13. Suggestions	13,14

### Introduction-

The Kudumbashree Community Network consists of more than 38 lakh women who are members of 2.15 lakh Neighbourhood Groups (NHG). The NHGs are federated at the Local Self Government level into registered societies, Called Community Based Society.

## Concept Note on Amrutham Nutrimix

Kudumbashree's activities that cover the entire state of Kerala are built around three critical components of "Micro Credit", "Entrepreneurship" and "Empowerment".

Kudumbashree has promoted more than 48,000 micro-enterprises across Kerala, owned and operated primarily by women from more than 1.30 lakh families.

The Integrated Child Development Services (ICDS) provides Supplementary Nutrition for children in the age group of six months to three years in the form of Take-Home-Ration (THR). The Social Welfare Department, Government of Kerala, has adopted the decentralized model of production and distribution of the THR in collaboration of Kudumbashree-State Poverty Eradication Mission.

From 2006 onwards Kudumbashree collaborates with the Social welfare department for the supply of the THR for supplementary nutrition in the Anganwadis in the state the Amrutham Nutrimix is a cereal-based powder mix developed by Central Plantation Crops Research Institute (CPCRI), Kasargod.

### Evolution-

The food supplement industry in Kerala is growing at a very fast pace especially with Multinational companies coming to the forefront and it is at this juncture but that could not be affordable to the normal person because of the price is higher. That's why Kudumbashree came up with the innovative idea of making the production of baby food a micro enterprise activity. After years of research by Kasargod District's Central Plantation and Crops Research Institute (CPCRI), the product 'Nutrimix' came into existence and a number of Kudumbashree enterprise groups are involved in its production in the state.

Kudumbashree started to give nutritious food through the Nutrimix units since 2007. before that a private company called Christy Friedgram Industries, supplied food supplement to some districts. When Kudumbashree took over to the supply, Government cancelled the order from outsiders. In 2005 Government calculated that, Kerala has 5,80,000 children belonging to the age category of 6 month to 3 years ,and thus aimed to provide 2.5 kg nutritious food per month to each children estimating 14,50,000 kg to be produced, and for that purpose planned to set up 1500 units across the state and each unit to produce 1000 kg per month.

Kudumbashree mission started training the interested members in 2005. Initially they created 2 training centres Kasargod and Kayanna(Kozhikode) and gradually increased the number in

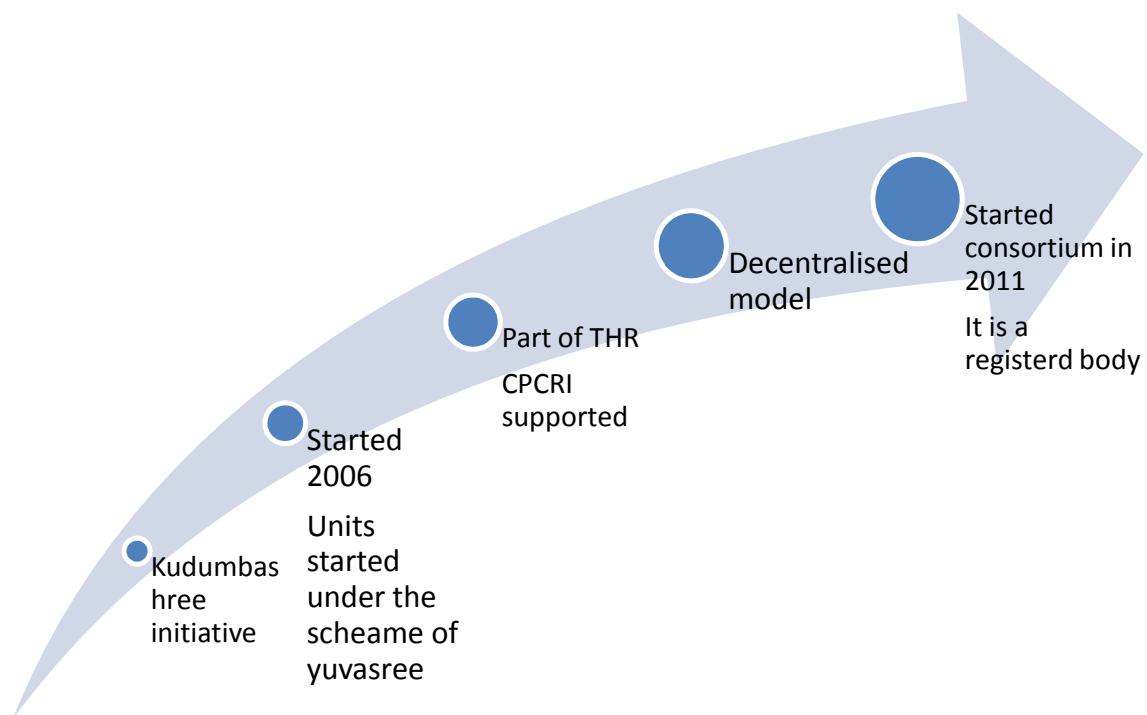
## Concept Note on Amrutham Nutrimix

other districts also. Through that centres they gave training to 2500 members .It was held in 2005 December to 2006 August. Nutrimix production officially got started in 2006 December onwards with some units. In the beginning they sold products on a home to door to door basis and they collected payment from customers only .Parents were reluctant to take product because of they were concerned about the quality of product. After 3 months Kudumbashree mission and Government came with an idea to supply Nutrimix through ICDS and payments were facilitated by Panchayat.

1. Started in 2006 in Kasaragod, with the help of Central Plantation Crop Research Institute (CPCRI), where 10-15 MECs got required training to start the enterprise. Kudumbashree has decided to start Nutrimix units across the state hence they had implemented MEC groups and trained them and send them across the Kerala to give training. They went to various parts of Kerala and counselled the beneficiaries to know how to start a unit and according to their initial calculation 2,20,000 rupees was needed to start a unit. The First Nutrimix unit has started in Kasargod named Keerthi.
2. From 2007-2011 units got established throughout the entire state of Kerala.
3. In 2011, the concept of Consortium got introduced in the structure of Nutrimix.
4. Soon after building the consortium, the state of Kerala got saturated with the supply of Amrutham Nutrimix by the existing units.

### Timeline-

## Concept Note on Amrutham Nutrimix



### Product Profile-

#### Amrutham Nutrimix-

The Amrutham Nutrimix supplement is provided to all Anganwadis of Kerala under the THRS scheme on a fortnight basis for children of 6 months to 3 years age group. The product is available in 500gm packets.

Nutrimix can be used without any age limit, for children better to have 50 grams and elders 100 grams for per day. It can be having either directly or to mix milk or water.

## Concept Note on Amrutham Nutrimix

Ingredients	Quantity per 100 grams of Nutrimix
1. Wheat	45 gm
2. Bengal Gram	15 gm
3. Ground Nut	10 gm
4. Soya	10 gm
5. Sugar	20 gm

### Tested components in a Government Lab- Protein & Moisture

Standard value- Protein 12-15 gm and Moisture should be less than 4.5.

Nutritional Facts	Micronutrients
Carbohydrate- 69.37%	Carotene- 71.6 ug
Protein- 16.14 gm	Thaimine- 0.3 mg
Fat- 5.44%	Riboflavin- 0.1 mg
Calcium- 191.23 mg	Niacin- 5.3 mg
Iron- 8.9 mg	Crude Fibre- 1.05 gm

### A nutritious food should satisfied the following parameters-

1. The content should be nutritious.
2. It will be precooked.
3. It must be ready to eat.
4. It must be digestible.
5. It should be within reasonable price.

CPCRI has consider this sort of parameters before making of the product and the product has proved to be very successful in the pilot survey when it was supplied to the underweight children in Anganwadis of Bedadukka Panchayat, and the children were able to gain normal weight within four weeks of the course and they have also made some changes according to the responses.

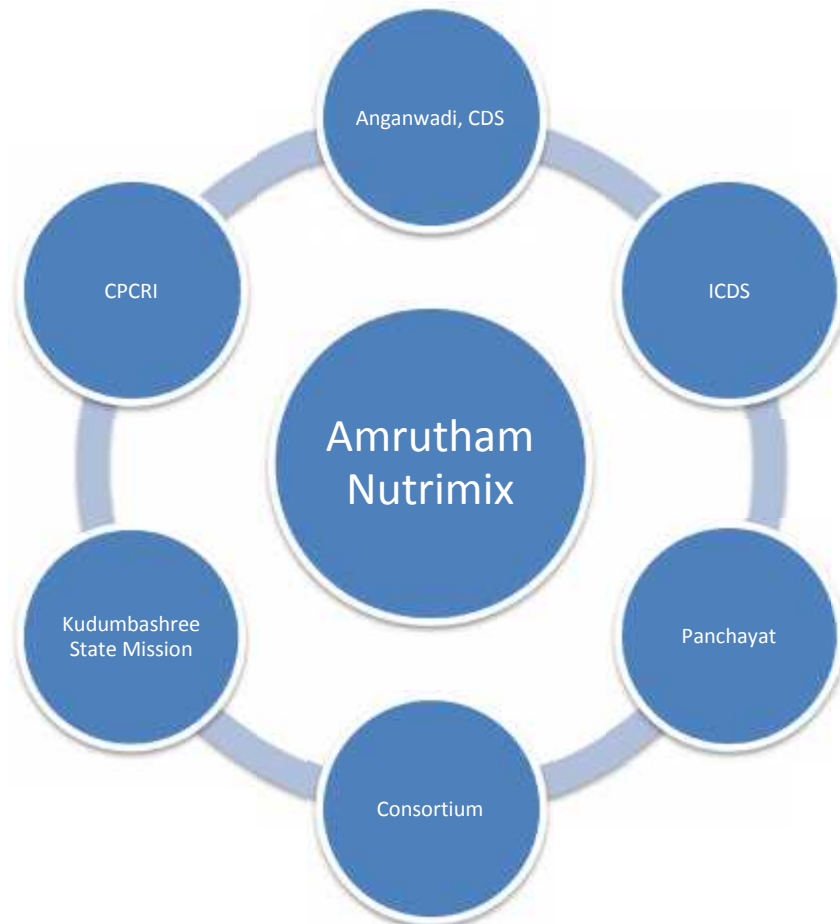
### Units-

## Concept Note on Amrutham Nutrimix

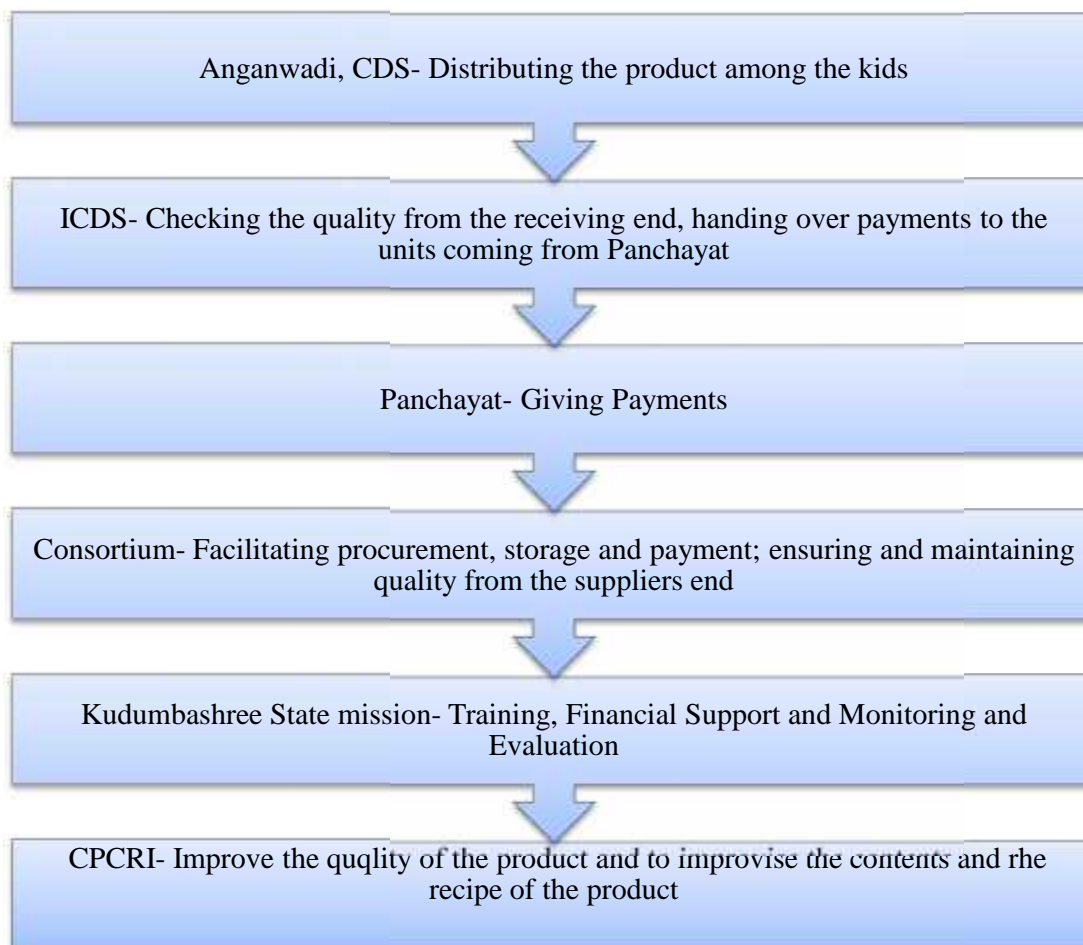
In Kerala, 398 Micro-Enterprise units are there owned and operated by 2023 women from 292 production facilities. Currently every child is provided with 3.5 kg of Amrutham Nutrimix a month, at the rate of 135 grams per day, for 25 days. Kudumbashree units supply Nutrimix to 32,922 Anganwadis in the state.

Kudumbashree started the Nutrimix project under Yuvashree scheme. Those who belong to the age group of 18-35 can apply for this. There was no discrimination in candidature on gender, caste or any other basis. The basic norm of starting a unit is, there should be at least 5 members in a unit and if it is 10 or more, they will be insisted to start a Common Facility Centre (CFC).

Kudumbashree will be giving training to these would-be Entrepreneurs like Pre-GOT, GOT (General Orientation Training) and EDP (Entrepreneurship Development Programme).



## Concept Note on Amrutham Nutrimix



To start the unit, the members will need to have business plan, through which they will get the loan from bank. Trained Micro Enterprise Consultants or MECs help the unit members to make this business plan. Of the total project cost, 10% will be the investment of the members, 50% will be bank loan and the balance amount will be given by Kudumbashree as subsidy. Initially they gave 50,000 rupees per unit to promote the programme, but stopped later.

To start a unit three kinds of license would be needed, such as, Panchayat license, Small Scale Industry license and Food Safety and Standards Authority of India's License.

Among the unit members there would be one president, one secretary and three other members in charge of raw materials, marketing and quality control respectively.

To start a unit, first thing that needs to be shaped is land. Unit members do not get any help in form of loans or subsidies to purchase land or building. It's completely on their own, and that's why most of the units are running in rented buildings or land.



## Concept Note on Amrutham Nutrimix

Unit purchases the machineries most of the times from the local dealers. To run a standard unit, following machineries will be needed; roaster, pulveriser, sifter, cooling tray, packing table, band sealing machine and storage space for packed products (see annexure 3).

Before the consortium came into existence the units used to procure raw material by themselves but now consortium helps to procure the raw material with the help of FCI, which supplies wheat. Other raw material units can buy as per their convenience either from local dealer or in accordance with the consortium.

### Activities of group members-

President- Looks after all activities of the enterprise and will presided in the meetings.

Secretary- Looks after all financial activities and calls meetings which will be held once in a month.

Raw Material Procurement- Looking after the raw materials needed for the production and purchasing according to the requirements.

Quality control- Kudumbashree mission has strictly ordered all the units, that they will have to get a sample tested from each batch of product from a recognised laboratory.

Marketing- To distribute the products to the Anganwadis and she is also looking if it any other product produced by the unit.

### Training-

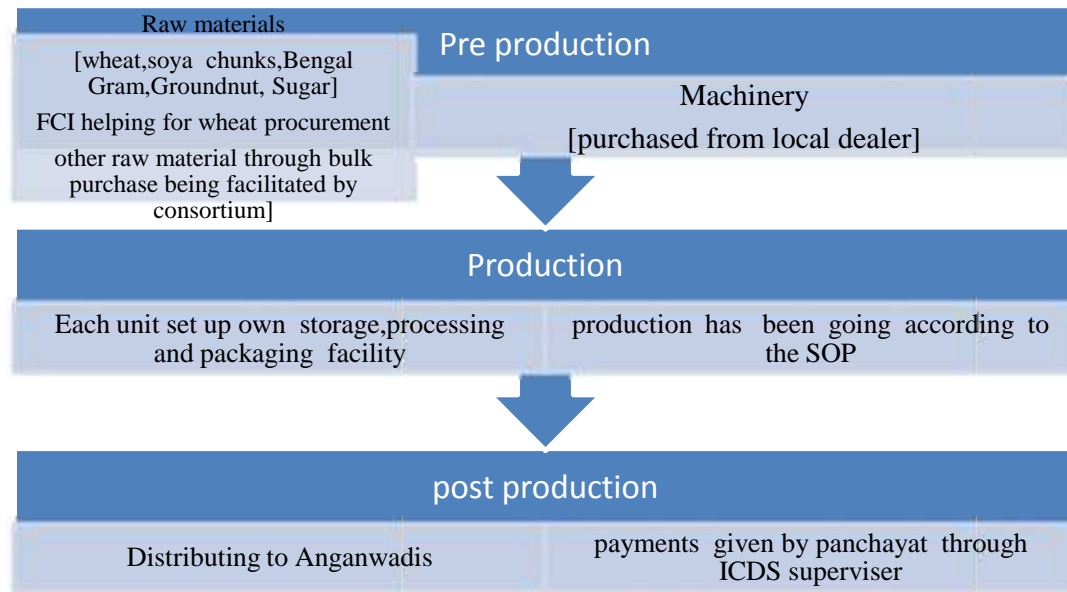
Pre GOT- Will be done in the ward level. It is a basic training given by pre-trained persons about how to start an enterprise through a 7 days entrepreneurship.

GOT – It is the training program will be happened in Panchayat level it has a 2 day training attended by members.

EDP- It is organized in the district level. In this module 2 days training would be given to the members. (see annexure 1)

## Concept Note on Amrutham Nutrimix

### Production



### Consortium-

The concept of consortium was nothing new to Kudumbashree. But in the ambit of Amrutham Nutrimix its presence felt needed soon after units got established in the entire state, because there was no monitoring agency to look after the units and support them in various ways. Currently under the state consortium every district will have a consortium. From each unit one member will go and form the general body of district consortium. Among those members five unanimously chosen members will form the executive body of district consortium. There will be one president, one secretary and three members in charge of raw material procurement, marketing and quality control. District consortiums are now setting up offices in each district headquarters as it accelerates its activities.

Consortium helps to procure wheat from FCI, as through district consortium the order gets placed and the units pay FCI via district consortium and it helps in monitoring and evaluation of the units also; as in if any unit is not functioning properly, consortium can report it to district mission, which can take further actions.

### CPCRI-

The contribution of CPCRI or Centre for Plantation Crop Research Institute is a reason behind the meteoric rise of Amrutham Nutrimix. CPCRI did not only decide on the content

## Concept Note on Amrutham Nutrimix

and recipe of the product but also gave the initial trainings to the aspiring entrepreneurs. After developing the product, CPCRI did an on farm testing of the product, so that through NHGs, the product can reach the vulnerable groups. Over all acceptability among the people, was found to be 3.8 out of 5, with 76% acceptability. In CPCRI trainings were not only given on hygienic production of Nutrimix, but also on packaging, food standards and personality development. After such efforts by CPCRI, 200 frontline demonstrations were conducted and four master training centres were established in Kasargod, Kozhikode, Palakkad and Alappuzha.

### Packaging and Distribution-

After production of the product the packaging gets done in the units in packaging labels (aluminium coated tetra packaging). The packaging material comes through auctions. Who so ever quotes the lowest price in the auction gets the order. Units are packing in 500 gram packets. Each packing cover costs has Rs.1.75. Kudumbashree wanted uniformity in labels that's why all labels are same over the units but they have allowed the units to put their name and manufacturing date on the product.

After packaging is done the product is brought to the Anganwadis by units own or rented vehicle and Anganwadis pays Rs.0.50 per kg for the transportation cost. Each unit will be getting their payment within three month of supply. Earlier it was not happening and they were getting payment after 5 and 6 months but consortium has brought some changes and they were facilitated to get payments early.

The units which are producing diversified products are using the name of CPCRI as a branding strategy to assure the customers of the products quality and credibility, which they cannot do without prior permission from CPCRI.

### Quality Control and Monitoring-

Quality control and checking is the most important part of the product that process facilitating by Kudumbashree district mission and consortium they have conducted periodic checks on raw materials and production units and that's why they have promoted bulk purchases, because they wanted to ensure good quality product to be supplied through units. Sample test from each batch is tested at the Government Analytical laboratory by the concerned ICDS supervisor and also they had order to each consortium to set up its own QC laboratory

## Concept Note on Amrutham Nutrimix

facilities. The Consortium secretary will conduct a visit to each unit in a district in every two months to see whether the units are following the SOP guidelines or not.

Monitoring will take place at district level committee created by Kudumbashree mission they have formed a committee to look after the issue and supervised by Community Development Society [CDS] at the LSG level. If any units fail to follow the SOP, Kudumbashree Mission is liable to take the orders of that unit and give it to some other nearby unit so that the demand meets the supply. Kudumbashree mission holds the power to shut a unit down also, if necessary. To get their orders back the unit needs to rectify their mistakes and report back to Kudumbashree mission. (see annexure 3)

### Impact-

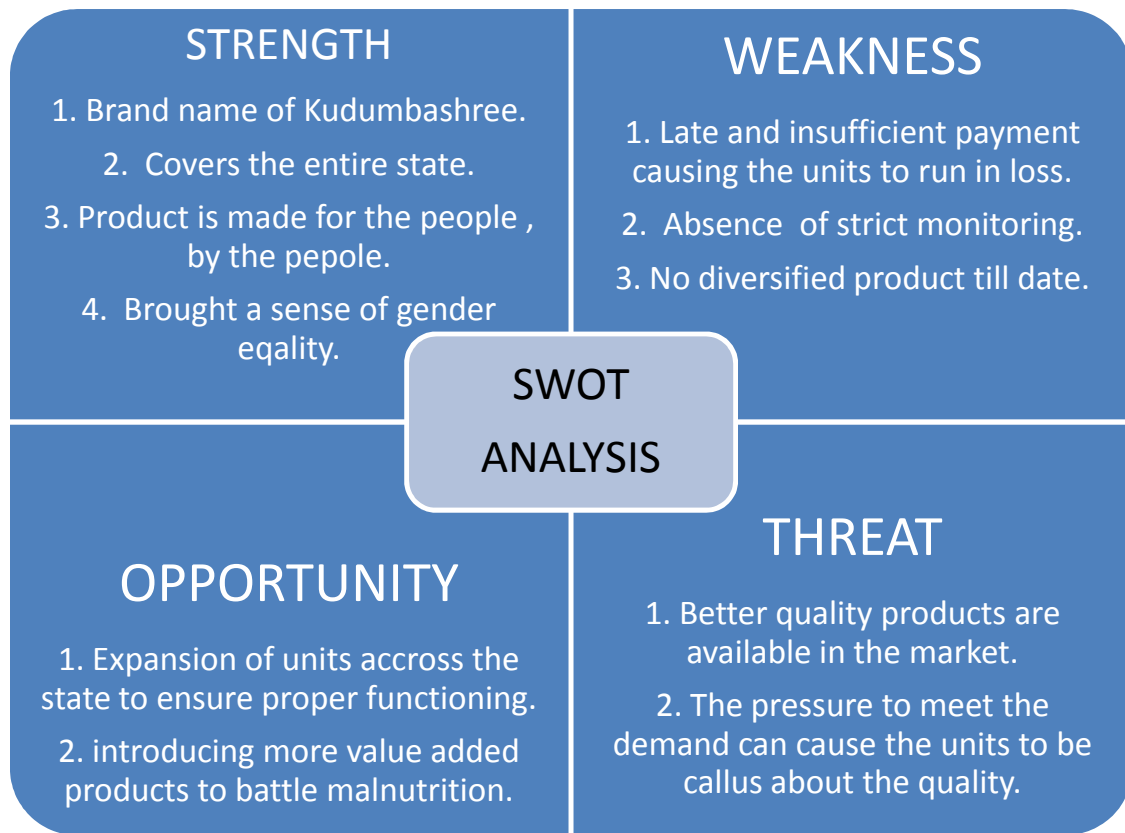
District wise production of Nutrimix in Kerala-

Kasargod- 16 units, 35 tonnes a month; Cannanore- 30 units 120 tonnes a month; Wayanad- 19 units, 45 tonnes a month; Kozhikode- 50 units, 125 tonnes a month; Malappuram- 53 units, 200 tonnes a month; Palakkad- 23 units, 125 tonnes a month; Thrissur- 30 units, 113 tonnes a month; Ernakulam- 30 units, 100 tonnes a month; Idukki- 27 units, 99 tonnes a month; Kottayam- 17 units, 85 tonnes a month; Alappuzha- 40 units, 67 tonnes a month; Pathanamthitta- 20 units, 48 tonnes a month; Quillion- 23 units, 85 tonnes a month; Trivandrum- 20 units, 50 tonnes a month.

Nutrimix food supplement is getting supplied to 40,000 children, below the age of five years, in 3000 Anganwadis, 60 blocks in kerala and 159 district of the tribal areas of Palakkad district.

Roughly 398 women groups have started to produce Nutrimix food supplement and the total production of Amruthasm Nutrimix in the state of Kerala have been 1,267 tonnes/month in the year of 2011.

### SWOT Analysis-



Challenges and Issues-

1. Earlier the units used to get 37 rupees per kg and now they get 56 rupees per kg but looking at the cost of raw materials it's evident that the actual cost per kg would be nearly 70 rupees per kg. So that units at least will have to produce 2,500 kgs to earn profit, while bearing other expenses like, electricity, gas and packing expenses. (see annexure 2)
2. Cost of land is high in Kerala; hence most of the units are running in rented buildings, incurring an extra cost. There is no such loan or grant to help them buy land.
3. In several places a single unit is covering a lot of area, which forces the unit to produce more than its capability and puts the quality of the product at risk.
4. Units in Panchayat areas get paid after long intervals which affect those units' performance in terms of raw material procurement, maintenance as well as the financial condition of the unit members.

## Concept Note on Amrutham Nutrimix

5. The taste of Nutrimix is not really popular among the consumers (children) because of the dominance of Soya in it.
6. Monitoring and evaluation should be more regular and systematic, ensuring not only product quality or quantity but an ideal way of running a production unit also.
7. Nutrimix is available only to the children who are able to come to the Anganwadis, leaving behind a large portion of kids bereft of the basic amenity of nutrition.
8. With the limited available resources, it's difficult for the units to conduct the supply part on their own and at the same time to do that they have to incur an extra cost as well.
9. District consortiums are supposed to perpetrate bulk purchase in order to help the units but in most of the districts it has not started yet, for which units are still not in a profit making stage.
10. Consortiums are still not having proper infrastructure (permanent office, detailed documentations) which is not allowing them to be a more efficient and organised agency.

### Suggestions-

1. Many units are suffering due to the delay in payments, especially in panchayat areas. If the units do not get payment in time, it will result in various problems, such as they will not be able to procure raw material or to repay loan. The cash to cash cycle of the entire structure should be made more efficient to avert such obstacles.
2. Every unit should be kept under strict monitoring, not just to find out their flaws but also to know what kind of difficulties they are facing (which will vary place to place) so that they can be addressed. District level consortium can play a crucial role in this aspect.
3. Examples of successful and diversified product making units can be set a models and best practices so that other units get necessary knowledge and motivation from them.
4. What kind of impact has Nutrimix created in areas where the rate of child mortality and malnutrition is high has to be properly documented and necessary action has to be taken on that basis; otherwise Nutrimix will fail to achieve its primary target.

## Concept Note on Amrutham Nutrimix

5. Whether Nutrimix can be supplied on a door to door basis or not has to be seen so that, children who are not being able to come to Anganwadis under some circumstances can also have it.

6. Consumer feedback has to be taken into consideration more critically to make the product better and for the units to have a clear agenda about what the consumer wants. Compilation of small product feedbacks can contribute to a larger product evolution.

### Conclusion-

Amrutham Nutrimix is different from other micro-enterprise ventures because it addresses two issues of pivotal importance at the same time; women empowerment and malnutrition. It has created a positive impact, changing society's mindset to a large extent. It has given women of Kerala an opportunity to earn a fixed and assured amount of money at the end of the month, which will not only be of financial help but also make them confident and help them to take part in the decision making process. This effort by them has been one of the most important weapons to battle malnutrition and child mortality, the bane of Indian society. Thus, Nutrimix needs to flourish for the sake of the betterment of our society.