



## TUISOLO WILL SUCCEED



Mr. Josefa Tuisolo (Left) and the PS for Agriculture – Mr. Ritesh Dass during the Central-Eastern Agriculture Show Farmer Awards.

The province of Rewa is synonymous with wet weather and is labeled in iTaukei as 'na vanua ni veidabibi' (muddy place) with a majority of its landscape being categorized as wetland.

With an abundance of waterways and a healthy rainfall, Rewa province is not lacking in rain and water and this poses a unique challenge to farmers because too much of a good thing can be bad.

For 46-year-old Josefa Tuisolo of Naqarani Village in Rewa, this challenge spurred him on as he thrived where opportunities for farming weren't abound.

Surely enough, where there is a will, there is a way and Mr. Tuisolo's strength of character and willpower was

his driving force throughout his farming exploits. Despite the geographical conditions of his province, he used it instead to set the foundations for his farm.

He defied the odds and farmed on his 10-acre farmland by employing the Tuatua Concept.

The Tuatua Concept entails transforming land, especially wetland to make it suitable for cultivation.

Soil is dug and grouped in an elevated area making it higher than its surrounding and then used for farming. In this way, water remains below and planting can proceed.

Establishing his farm in 2013, the Naqarani native developed his farm with grit and determination all the

while being cautious of his surrounding environment.

"If things could grow in impossible places around the world, for sure it can also grow here in the Rewa delta and determination is all that's required," he said.

"I decided to make a difference and create an impact in what I know can bring about changes to those around me."

With this, Josefa conceptualized and implemented his farming plans at the Vunikoqo farm and he never gave up with each obstacle he encountered.

"To start off, we planted 15,000 plus dalo suckers and because of the condition of the place all of it was ruined and although we were disheartened, we

didn't give up," he said.

"Because money is needed to run a farm, and since we were newly established, I left Suva for Kokomo Island Resort to earn farm money," said Josefa.

"With farming still in my mind, I returned to Naqarani and this time I also came with the idea of using the Tuatua concept and to date, we've excelled using this method," he said.

Josefa decided to dig in his heels and pour his blood, sweat and tears into accomplishing his farming goals as he regaled his farms inception; "There was also salt water intrusion. This was amongst the many obstacles we faced while establishing our farm," he said.

"It is also the reason why most of the crops do not grow well and are lost every year because they are becoming too wet and salty to grow and the ones growing tend to wither on hot sunny days," he said.

"When we implemented the Tuatua concept, apart from planting crops only, we also thought of another tactic to adapt to the saltwater intrusion," he said.

"In the dug drains, we let tilapia feed and breed and on the side we did some conservation practices next to the fields."

"Proper irrigation is also vital so farmers can remove excess salt from the soils through irrigation."

This farming system has seen him through many harvests and has goaded him to continue being an agent of change in an area that was once thought not viable for commercial farming development.

"We planted dalo, cassava, duruka, plantain and vegetables on the piece of land and we even trialed rice and

watermelon which succeeded," he said.

"My first duruka harvest earned us approximately \$1,000 and the second harvest approximately \$3,000 and I planted approximately 10,000 dalo suckers on my farm," he said.

"Although a lot are damaged and we do not harvest the planned amount, we are grateful that we are able to produce something, make use of the land and defy the odds by rebutting the perception for which this place is known for," said Josefa.

Josefa with a heart of gold has brought family members who are experiencing family or personal problems to help and live on the farm.

"I want to help them find their purpose in life and through farming they will find their true worth and be able to stand on their own feet," he said.

Together with his four casual and one permanent laborer who assists in the sales of the crops at his stalls in the Suva Market, Josefa is determined to achieve more in the future.

"We will not end here we will continue, the more we fall the greater we stand and continue from what we have learnt."

Through his farm development, Josefa has built a two-storey house and moved out from the lean-to farmhouse he started with. He has also bought a second hand twin cab worth \$25,000.00 through the Fiji Development Bank and a two-panel solar system worth \$8,000.00.

His wisdom and passion to excel in agriculture has led to his recognition as he was awarded the Special Category Award for his hard-work during the 2020 Central/Eastern Agriculture Show held last month at Syria Park in Nausori.

## GROW DALO FOR CASH

### Best varieties for export

- Tausala ni Samoa (Main export variety)
- Samoa
- Kurokece
- Vavai
- Dalo ni Toga
- Wararasa
- Maleka Dina
- Vulaono

### Planting time

- Main season crop - July to January.
- Off-season crop - March to June.
- Planting all year round is possible in the wet zones.
- Regular monthly planting (phase planting will maintain consistent supply).
- Tausala ni Samoa is susceptible to dry seasons.
- Samoa Hybrid, Samoa, Wararasa can withstand dry conditions.

### Where to grow

- Avoid steep slopes (of more than 15°).
- Flat to gentle slopes are best for dalo.
- Soil must be fairly deep (15 cm or more) and must be well drained.
- Alluvial soils of the river valleys in the wet and intermediate zones are most fertile and rich in organic matter.

### Preparing the land

- Loosen the soil by digging with fork or by ploughing and

harrowing.

- On the flat land, use bullocks or tractor and allow excess water to drain away.
- Dalo will not grow well in stagnant water as this will encourage corm rot.

### How to plant

- Plant spacing: 1.0m x 1.0m on hill slopes and 1.0 x 0.6m on flat lands to produce large corms and higher yields.
- In wetter areas spacing may be closer.
- Make a hole 9 to 12 inches deep (30cm) with a stick, fork or posthole spade.
- Plant the sucker by placing it in the bottom of the hole and press firmly with loose soil.
- Planting in rows makes it easier to weed, fertilize and hoe.

### Planting material

- In areas infested with Papuana beetle:-
  - Use clean planting material
  - Dip planting material in Diazinon mixture for 20 minutes to kill the eggs.
  - Use large and healthy suckers (5cm in diameter).
  - Suckers established faster and grow vigorously to form canopy. This reduces weed growth.

### Fertilizing

- All Fiji soils contain less nitrogen.
- Apply 45g Urea (46%N) per plant

in 3 split doses after planting.

- 15g after 5 weeks
- 15g after 5 weeks
- 15g after 5 weeks

- Apply Super Phosphate 25kg (P)/ha and Muriate of Potash 100kg (K)/ha at planting Or NPK mixture at 200kg/ha at planting and urea 100kg/ha at 10 weeks after planting.

### Weed Control

- Dalo crop must be kept weed free in the first 4 months.
- Control weeds manually by weeding; apply Gramoxone at 15ml in 14 litres of water.
- Avoid spraying the dalo plants. Use a spray shield and spray close to the weeds.
- Good land preparation will

effectively reduce emergence.

### Diseases and Pests

- Wilting of plants may be due to corm rot in severe
- water logged soils. Dig deep drains to remove excess and stagnant water.
- Brown leaf spot are of minor economic importance Plant hoppers, white fly and cut worms often attack dalo leaves and stems in humid areas.
- Dalo beetles feed on dalo corms making large holes which reduce their value and can result in corm rot and the complete loss of the corm.

### Control by spraying with:

- Malathion, 20ml/14L of water (against) Or Orthene, 25g/14L

of water. Or Attack, 40ml/20L of water. For taro beetle control apply around the plants at planting and after 3 months from planting with:

- Confidor, 1.5ml/L of water.
- Bifenthrin, 2.5ml/L of water.
- Sunclopid, 2.5ml/L of water.

### Harvesting

- Most local varieties mature and are ready for harvest at 10 to 12 months old.
- Shelf life for dalo corm is around 2 to 3 weeks.
- Avoid damaging corms by digging deeply with stick and gentle pulling.
- Optimum yield, 20 to 25 tonnes/ha.

### Gross Margin

- \$5070.60 per hectare

