Super Bag Business Case

Marilyn Aranas

- Chairman, Sto. Nino Multi-Purpose Cooperative, Sto. Nino, Butuan City
- Member of the Butuan City Organic Fertilizer Producers group
- Has loved farming and gardening since childhood
- Went into farming after working in a private trading company for 23 years

Farm enterprise

- Produces rice on 4 hectares of land with organic farming technology
- Plants rice twice a year
- Uses 80 kilograms of certified seeds per hectare, average yield per hectare is around 120 cavans
- Sells rice (milled at the cooperative) to nearby communities, sells good seeds to farmers who cannot afford buying from accredited seed growers
- Sometimes stores good seeds for 3–4 months for the next planting season, but often buys certified seeds from accredited seed growers
- Grains for milling stored up to 5 months

Thoughts after using the Super Bag

"Using Super Bags will not only bring savings from reduced seed rate, but will enable farmers to plant, harvest, and sell rice on time, to benefit from higher market prices. Super Bags can help farmers store good seeds and not worry about supply from government-certified seed programs. Super Bags can help farmers store their seeds longer and still be assured of good seed germination and a well-timed harvest."

"I want to use the Super Bags again. I will tell my fellow farmers to use them to store their seeds. I hope Super Bags will be made locally available at a farmer-friendly price."

"Storing seeds in IRRI Super Bags prevents losses caused by rodents and birds, while seeds stored in ordinary bags were partially eaten by rats and weighed 5 kilograms less."

Income calculation

Current storage practice—polyethylene bag	
Current seed rate	80 kg/ha
Current germination rate	82%
Actual weight of seeds germinated	65.6 kg/ha (80 kg/ha × 82% germination)
No. of growing seasons per year	2
Seeds stored in Super Bags	
Super Bag germination rate	94%
New seed rate	50 kg/ha
Amount of seeds saved	30 kg/ha (80 kg/ha minus 50 kg/ha)
NFA price of paddy	Php 17/kg
Income	
Revenue	Php 510/ ha (30 kg/ha × Php 17/kg)
Cost	Php 120/ha (1 pc SB/ha × Php 120/pc)
Net income	Php 390/ha (Php 510/ha minus Php 120/ha)
Net income/season thereafter	Php 510/ha (Php 510/ha minus 0*)
Total income (two seasons)	Php 900/ha or US$21.4/ha (Php 390/ha + Php 510/ha)

**Super Bags can be reused if not punctured.*

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Super Bag Business Case

Pedro Serrano

From the flood-prone area of Barangay Abilan, Buenavista, Agusan del Norte

Farm enterprise

- Grows corn
- Grows rice twice a year on a 0.5-hectare farm
- Harvests 80 bags in the dry season and 120 bags in the wet season
- Stores at home 27 sacks of seeds every season for a year, for his own use and for selling

Thoughts BEFORE using the Super Bag

"The Super Bag looks good, although it is a bit expensive for me. I am interested to do some trials."

Thoughts AFTER using the Super Bag

"After the trial, the grains stored in Super Bags have fewer rice weevils and have no grain discoloration."

Income calculation

Current storage practice—polyethylene bag	
Current seed rate	70 kg/ha
Current germination rate	75%
Actual weight of seeds germinated	52. 5 kg/ha (70kg/ha × 75% germination)
No. of growing seasons per year	2
Seeds stored in Super Bags	
Super Bag germination rate	82%
New seed rate	50 kg/ha
Amount of seeds saved	20 kg/ha (70 kg/ha minus 50 kg/ha)
NFA price of paddy	Php 17/kg
Income	
Revenue	Php 340/ ha (20 kg/ha × Php 17/kg)
Cost	Php 120/ha (1 pc SB/ha × Php 120/pc)
Net income	Php 220/ha (Php 340/ha minus Php 120/ha)
Net income/season thereafter	Php 340/ha (Php 340/ha minus 0*)
Total income (two seasons)	Php 560/ha or US$13.3/ha (Php 220/ha + PhP 340/ha)

**Super Bags can be reused if not punctured.*

"I plan to use Super Bags again, although I am only willing to pay a much lower price."

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Super Bag Business Case

Hermelina Saducas

53 years old, rice and hog farmer from Brgy. Abilan, Buenavista, Agusan del Norte

Farm enterprise

- Raises hogs
- Grows rice twice a year on irrigated (0.7 hectare) and rainfed (0.3 hectare) land
- Harvests 60 bags of paddy per hectare in the dry season and 77 bags of paddy in the wet season
- Uses 20 bags of paddy for family consumption and sells the rest
- Stores at home 20 sacks of seeds per season for 4–5 months
- Seldom sells seeds

Thoughts BEFORE using the Super Bag

"I liked what I saw in the video of a Bicolano farmer telling the benefits of a Super Bag. I would like to test the Super Bag. It would be good if the price of the Super Bag can be lowered."

Income calculation

Current storage practice—polyethylene bag	
Current seed rate	58 kg/ha
Current germination rate	75%
Actual weight of seeds germinated	43.5 kg/ha (58kg/ha × 75% germination)
No. of growing seasons per year	2
Seeds stored in Super Bags	
Super Bag germination rate	89%
New seed rate	50 kg/ha
Amount of seeds saved	8 kg/ha (58 kg/ha minus 50 kg/ha)
NFA price of paddy	Php 17/kg
Income	
Revenue	Php 136/ ha (8 kg/ha × Php 17/kg)
Cost	Php 120/ha (1 pc SB/ha × Php 120/pc)
Net income	Php 16/ha (Php 136/ha minus Php 120/ha)
Net income/season thereafter	Php 136/ha (Php 136/ha minus 0*)
Total income (two seasons)	Php 152/ha or US$3.6/ha (Php 16/ha + Php 136/ha)

**Super Bags can be reused if not punctured.*

Thoughts AFTER using the Super Bag

"The grains stored in the Super Bags have fewer rice weevils and broken grains. I would like to use the Super Bag again, but I'm willing to buy if it is sold at a cheaper price."

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Super Bag Business Case

Anastacio Espiritu

Rice and coconut farmer from Taguibo, Butuan City, Philippines

Board of Trustees member, Taguibo Integrated Pest Management Irrigators' Association

Farm enterprise

- Has 100 coconut trees and sells 25 nuts per tree at Php 10/nut
- Grows rice twice a year on 2.25 hectares of land
- Harvests 170 bags in the dry season and 140 bags in the wet season
- Stores 35 kilograms of grain per season at home for 3–6 months for household consumption

Thoughts after using the Super Bag

"Using a Super Bag will maintain the viability of your seeds. Meanwhile, seeds stored in ordinary sacks will be attacked by insects, birds, and rats."

Income calculation

Current storage practice—polyethylene bag	
Current seed rate	70 kg/ha
Current germination rate	76%
Actual weight of seeds germinated	53.2 kg/ha (70kg/ha × 76% germination)
No. of growing seasons per year	2
Seeds stored in Super Bags	
Super Bag germination rate	90%
New seed rate	50 kg/ha
Amount of seeds saved	20 kg/ha (70 kg/ha minus 50 kg/ha)
NFA price of paddy	Php 17/kg
Income	
Revenue	Php 340/ ha (20 kg/ha × Php 17/kg)
Cost	Php 120/ha (1 pc SB/ha × Php 120/pc)
Net income	Php 220/ha (Php 340/ha minus PhP 120/ha)
Net income/season thereafter	Php 340/ha (Php 340/ha minus 0*)
Total income (two seasons)	Php 560/ha or US$13.3/ha (Php 220/ha + Php 340/ha)

**Super Bags can be reused if not punctured.*

"You can store your seeds inside a Super Bag and it will last up to a year. On the other hand, I observed that seeds stored in ordinary sacks develop molds as early as 6 months."

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Super Bag Business Case

Eusebio Beronilla

56 years old, store owner, rice farmer and hog raiser from Abilan, Agusan del Norte

Farm enterprise

- Owns a *sari-sari* store and raises hogs
- Grows rice on 2 hectares of irrigated land
- Harvests rice twice a year; 60 bags of paddy per hectare in the wet season and 75 bags of paddy per hectare in the dry season
- Stores 29 sacks of seeds in their house per season for 3–4 months

Thoughts BEFORE using the Super Bag

"The Super Bag looks good. It is thicker than an ordinary sack. However, it is not affordable for us. If possible, it would be good to have a lower price for it."

Thoughts AFTER using the Super Bag

> "After the trial, the Super Bags were still in good condition and can be used again. The grains I stored in woven bags were eaten by rodents unlike those that I stored in Super Bags."

Income calculation

Current storage practice—polyethylene bag	
Current seed rate	90 kg/ha
Current germination rate	75%
Actual weight of seeds germinated	67.5 kg/ha (90 kg/ha × 75% germination)
No. of growing seasons per year	2
Seeds stored in Super Bags	
Super Bag germination rate	90%
New seed rate	50 kg/ha
Amount of seeds saved	40 kg/ha (90 kg/ha minus 50 kg/ha)
NFA price of paddy	Php 17/kg
Income	
Revenue	Php 680/ha (Php 40 kg/ha × Php 17/kg)
Cost	Php 120/ha (1 pc SB/ha × Php 120/pc)
Net income	Php 560/ha (Php 680/ha minus Php 120/ha)
Net income/season thereafter	Php 680/ha (Php 680/ha minus 0*)
Total income (two seasons)	Php 1,240/ha or US$29.5/ha (Php 560/ha + Php 680/ha)

**Super Bags can be reused if not punctured.*

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Super Bag Business Case

Thoughts after using the Super Bag

> "We placed our good seeds inside the Super Bag and opened them 6 months later. They were still the same! Their seed color was still good. The seeds stored in regular sacks already had black spots."

Adelaida Dumaboc

Rice and swine farmer from Sto. Niño, Butuan City, Philippines

Vice-chairman, Sto. Niño Multipurpose Cooperative, Butuan City, Philippines

Farm enterprise

- Two pigs; sells two litters a year at Php 2,000/litter
- Three goats, but no income from goat-raising yet
- Raises tilapia for household consumption
- Grows rice twice a year on 15 hectares of land
- Harvests 80 bags per hectare in the dry season and 100 bags per hectare in the wet season
- Sells fresh rice at the cooperative at Php 15/kg; if dried, it sells at Php 17/kg based on NFA price

> "The grains inside the Super Bag tasted better and were more aromatic compared with the grains stored in regular sacks."

Income calculation

Current storage practice—polyethylene bag	
Current seed rate	55 kg/ha
Current germination rate	85%
Actual weight of seeds germinated	46.8 kg /ha (55 kg/ha × 85% germination)
No. of growing seasons per year	2
Seeds stored in Super Bags	
Super Bag germination rate	94%
New seed rate	50 kg/ha
Amount of seeds saved	5 kg/ha (55 kg/ha minus 50 kg/ha)
NFA price of paddy	Php 17/kg
Income	
Revenue	Php 85/ha (5 kg/ha × Php 17/kg)
Cost	Php 120/ha (1 pc SB/ha × Php 120/pc)
Net income	Php -35/ha (Php 85/ha minus Php 120/ha)
Net income/season thereafter	Php 85/ha (Php 85/ha minus 0*)
Total income (two seasons)	Php 50/ha or US$1.2/ha (Php -35/ha + Php 85/ha)

**Super Bags can be reused if not punctured.*

"I am more convinced to use Super Bags now because the results were great."

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Super Bag Business Case

Melodine Montero

Rice and duck farmer from Sto. Niño, Butuan City, Philippines

Member, Sto. Niño Multipurpose Cooperative, Butuan City, Philippines

Farm enterprise

- Harvests 300 duck eggs per day and sells at Php 6 per egg
- Grows rice twice a year on 4 hectares of land
- Harvests 75 bags in the dry season and 85 bags in the wet season
- Stores 5 bags of grains for milling and household consumption per season
- Stores seeds in the house

Thoughts after using the Super Bag

" I noticed several dead insects in the rim of the Super Bags. The color of the grain did not change, unlike the grains stored in an ordinary sack—the grains were discolored."

" When we used the Super Bags, we saw for ourselves that the benefits were all true."

Income calculation

Current storage practice—polyethylene bag	
Current seed rate	120 kg/ha
Current germination rate	85%
Actual weight of seeds germinated	102 kg/ha (120 kg/ha × 85% germination)
No. of growing seasons per year	2
Seeds stored in Super Bags	
Super Bag germination rate	93%
New seed rate	50 kg/ha
Amount of seeds saved	70 kg/ha (120 kg/ha minus 50 kg/ha)
NFA price of paddy	Php 17/kg
Income	
Revenue	Php 1,190/ ha (70 kg/ha × Php 17/kg)
Cost	Php 120/ha (1 pc SB/ha x Php 120/pc)
Net income	PhP 1,070/ha (Php 1,190/ha minus Php 120/ha)
Net income/season thereafter	Php 1,190/ha (Php 1,190/ha minus 0*)
Total income (two seasons)	Php 2,260/ha or US$53.8/ha (Php 1,070/ha + Php 1,190/ha)

**Super Bags can be reused if not punctured.*

> "Being a trial cooperator, I receive queries about Super Bags. I tell these spectators that Super Bags are made from a special material. I also tell them that they're really beneficial because I, myself, used them and saw the stark difference from the ordinary storage bags that we used before."

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Super Bag Business Case

Pricilla banban-ig

Rice and duck farmer from Sto. Niño, Butuan City, Philippines

Member, Sto. Niño Farmers' Association, Butuan City, Philippines

Farm enterprise

- Raises ducks
- Owns two threshers and provides services for Php 12.50 per sack (1 sack = 60 kilograms)
- Has 7 hectares (ha) of rice farming land, which is rented out to other farmers for Php 9,000/ha
- Harvests 80 bags/ha in the dry season and 85 bags/ha in the wet season

Thoughts after using the Super Bag

"Super Bags protect the stored grains from rats, rice weevils, and bird infestation, as compared to grains stored in regular sacks."

Income calculation

Current storage practice—polyethylene bag	
Current seed rate	120 kg/ha
Current germination rate	77%
Actual weight of seeds germinated	92.4 kg/ha (120 kg/ha × 77% germination)
No. of growing seasons per year	2
Seeds stored in Super Bags	
Super Bag germination rate	91%
New seed rate	50 kg/ha
Amount of seeds saved	70 kg/ha (120 kg/ha minus 50 kg/ha)
NFA price of paddy	Php 17/kg
Income	
Revenue	Php 1,190/ ha (70kg/ha × Php 17/kg)
Cost	Php 120/ha (1 pc SB/ha × Php 120/pc)
Net income	Php 1,070/ha (Php 1,190/ha minus Php 120/ha)
Net income/season thereafter	Php 1,190/ha (Php 1,190/ha minus 0*)
Total income (two seasons)	Php 2,260/ha or US$53.8/ha (Php 1,070/ha + Php 1,190/ha)

**Super Bags can be reused if not punctured.*

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Super Bag Business Case

Romeo Lasco

Farmer leader, Agusan del Norte chapter of National Farmers' Association of the Philippines, an association that reaches out to 59 farmers' associations in the Caraga Region.

Chairman, Taguibo Farmers' Association

Regional Director, Small Water Impounding Irrigators' Association

Award-winning organic farmer

" I was able to store seeds for our organic seed production venture. I share my experience with Superbags to farmers during regular organization meetings that I lead or I am a member of."

Farm enterprise

- Produces organic fertilizer
- Stores five bags of grains for milling and household consumption per season
- Stores seeds in an office that is frequently flooded when it rains heavily.

Thoughts after using the Super Bag

"I have lower seed rate after using Super Bags. The grains I stored in Super Bags had better color than the grains I stored in ordinary sacks."

Income calculation

Current storage practice—polyethylene bag	
Current seed rate	60 kg/ha
Current germination rate	85%
Actual weight of seeds germinated	51 kg/ha (60 kg/ha × 85% germination)
No. of growing seasons per year	2
Seeds stored in Super Bags	
Super Bag germination rate	92%
New seed rate	50 kg/ha
Amount of seeds saved	10 kg/ha (60 kg/ha minus 50 kg/ha)
NFA price of paddy	Php 17/kg
Income	
Revenue	Php 170/ ha (10 kg/ha × Php 17/kg)
Cost	Php 120/ha (1 pc SB/ha × Php 120/pc)
Net income	Php 50/ha (Php 170/ha minus PhP 120/ha)
Net income/season thereafter	Php 170/ha (Php 170/ha minus 0*)
Total income (two seasons)	Php 220/ha or US$5.2/ha (Php 170/ha + Php 220/ha)

**Super Bags can be reused if not punctured.*

"I find the Super Bag very useful in maintaining the quality of my grains. Having experienced its benefits, I will recommend it to my fellow seed producers and farmers."

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Super Bag Business Case

Servellano Dumaboc

Rice and duck farmer from Sto. Niño, Butuan City, Philippines

Member, Sto. Niño Multipurpose Cooperative, Butuan City, Philippines

Farm enterprise

- Harvests 300 duck eggs per day and sells at Php 6.00 per egg
- Grows rice twice a year on 4 hectares of land
- Harvests 70 bags in the dry season and 84 bags in the wet season
- Stores five bags of grains for milling and household consumption per season
- Stores seeds in the house

Thoughts after using the Super Bag

"Others said that the Super Bag was good because insects could not enter it. So, I tried using it. It's true, really true; insects cannot enter the Super Bag."

"Rats and insects go near regular sacks filled with grains, but they do not go near Super Bags."

Income calculation

Current storage practice—polyethylene bag	
Current seed rate	55 kg/ha
Current germination rate	81%
Actual weight of seeds germinated	44.6 kg/ha (55 kg/ha × 81% germination)
No. of growing seasons per year	2
Seeds stored in Super Bags	
Super Bag germination rate	88%
New seed rate	50 kg/ha
Amount of seeds saved	5 kg/ha (55 kg/ha minus 50 kg/ha)
NFA price of paddy	Php 17/kg
Income	
Revenue	Php 85/ha (5 kg/ha × Php 17/kg)
Cost	Php 120/ha (1 pc SB/ha × Php 120/pc)
Net income	Php -35/ha (Php 85/ha minus Php 120/ha)
Net income/season thereafter	Php 85/ha (Php 85/ha minus 0*)
Total income (two seasons)	Php 50/ha or US$1.2/ha (Php -35/ha + Php 85/ha)

**Super Bags can be reused if not punctured.*

> "Super Bags are useful for storing seeds and grain for household consumption, without being attacked by insects."

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