Manok Mabuhay: Dressed or Undressed?

In 2009, the Punla sa Tao Foundation piloted Manok Mabuhay, a backyard chicken-raising arrangement with farmers in the rural town of Cavinti, Laguna, Philippines. After successfully completing three growing cycles, Manok Mabuhay (Cheers to Chickens) expanded to the neighboring towns of Luisiana and Siniloan.

Despite Punla's initial success, the third growing cycle performance report from the project's veterinarians revealed a puzzling finding — a sudden drop in the harvest recovery rate (HRR) and an increase in the feed conversion ratio (FCR) for many farmers. Manok Mabuhay Project Manager Glenn N. Baticados knew that if the project was to be replicated elsewhere, it would have to become more efficient.

Looking ahead, Baticados also anticipated that the harvesting of chickens for live sales would become operationally more difficult as the project's capacity and grower base increased. Baticados thought hard about how the project would overcome these hurdles. His light bulb moment came when he realized that these operational issues could be addressed if the project harvested for the dressed chicken[i] market only.

i Dressed chicken is slaughtered, defeathered, eviscerated whole birds with the head and feet removed, i.e., ready-to-cook whole birds.

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He also thought about the possibility of buying chicken crates to improve harvesting for the dressed chicken market, but the crates were expensive and he did not know how the purchase would impact the project's finances. Ultimately, he was faced with the dilemma of whether to harvest for the dressed chicken market only, or continue with the project's existing arrangement of harvesting for both live sales and the dressed chicken market.

Manok Mabuhay Background

The Punla sa Tao Foundation, in partnership with Bounty Agroventures, Inc. (BAVI), started the Manok Mabuhay project in August 2009. As was typical of most agri-venture pilots, there were a number of hurdles to overcome in the first growing cycle. But after three growing cycles, a system was in place.

The Project

The backyard project started with the selection of the site. The foundation's project manager scouted, assessed, and selected rural towns with farming communities that showed potential for becoming partner beneficiaries of the Manok Mabuhay Project. The foundation's corporate partner, BAVI — a private chicken company that provided all the chicks, feed, medicines, and supplements — would approve the sites. Typically, the site was approved if BAVI had operations in the proposed area and if the area was within a 100-km radius of its nearest dressing plant.

Once a site was approved by BAVI, Punla coordinated with the local government through its municipal agriculturist. The municipal agriculturist was responsible for issuing agri-zone certification and calling general assemblies of farmers. During the farmers' general assemblies, Punla briefed the farmers on the project's parameters and invited them to become backyard chicken growers. Farmers signed a document signifying their interest and proposing that their farm sites be used for the project. The sites were subject to inspection and approval by Punla.

Farmers were grouped based on their proximity to the farm sites. A farmer cluster was composed of four to five farmers or a group with a capacity of at least 5,000 chickens. Once the farmers were identified and selected, Punla coordinated with local barangay[ii] officials to secure permits to enable its farmers to install backyard broiler production facilities.

The farmers were responsible for building their own chicken houses using readily available indigenous materials like bamboo and coconut lumber. They could avail themselves of financial assistance from SIKAP-BIDANI, a microfinance partner of Punla, for the construction of the chicken houses in the amount of Php 20,000 (USD 470). Constructing the chicken houses took about four to six weeks. At the same time, the farmers underwent Punla's technical training in poultry production.

Manok Mabuhay Growing Cycle

Once the chicken houses were ready, Punla projected the capacity of the new poultry houses in the area. Punla communicated the projected capacity to BAVI, which scheduled the loading of the chicks as set by its area veterinarian.

ii A barangay, formerly called a barrio, is the smallest administrative division in the Philippines, and is the native Filipino term for a village, district, or ward.

Punla conducted team building activities prior to the loading of chicks. This is because the bayanihan system was employed and deeply encouraged among farmers. Derived from the word *Bayan* (meaning town, nation, or community), "bayanihan" is a Filipino word that means, "being a Bayan." It is used to convey a spirit of communal unity and cooperation.

During the brooding cycle, Punla managed the farmers' performance through weekly monitoring, recordkeeping, and technical assistance, while the farmers followed a detailed production program. After a week into the project, the average weight of the chicks was estimated by weighing 2% of the chicks. In the third week, the HRR was projected and the average live weight (ALW) of the chickens was estimated. The information was then sent to BAVI, which scheduled the harvest. Harvesting could be dedicated to live sales or dressing plants. In 2010, the project had a capacity of 33,000 birds every growing cycle with a HRR of 95.5% and 96.5% for live sales and the dressed chicken market respectively. On average, there were six growing cycles. (See **Appendix A** for the Manok Mabuhay growing cycle).

Harvesting for the Live Sales Market

For live sales, the minimum weight of chickens was 1.6 kg, with a standard ALW of 1.75 kg. Harvesting for live sales took place 33-35 days after loading the chicks. *Viajeros* (market assembly/wholesale intermediaries) usually booked orders with BAVI and based on the orders, BAVI scheduled the harvest day.

On the day of the harvest, truckers who worked for the *viajeros* went to the harvest site. The chickens were harvested by the farmers in groups of five, and were tied together. One farmer could catch, tie, and carry 10 chickens at a time. Nevertheless, tied chickens were weighed in 20s, and it took two people to bring 20 chickens to the digital scale provided by BAVI.

During the weighing, a checker[iii] from BAVI and a checker from Punla recorded the weights. The computations were then double-checked for accuracy and consistency, and the checkers attested to the truth and accuracy of the resulting document. Copies of the record went to the farmer, Punla, and BAVI after the harvest was complete.

Harvesting for the live sales market was very time-consuming, laborious, and required a number of harvesters. The activity usually began at 5 p.m. and lasted until 9 p.m. or 10 p.m. The harvesting was completed over the course of two days. (See **Appendix B** for harvesting for the live sales market).

Harvesting for the Dressed Chicken Market

On the other hand, for the dressed chicken market, the minimum weight of chickens was 1.2 kg, with a standard ALW of 1.35 kg. Harvesting for the chicken dressing plant took place 27-30 days after loading. A BAVI truck loaded with crates arrived on site between 8 p.m. and 9 p.m.

Before harvesting began, the farmers weighed a sample of chickens — usually 2% of capacity. Chickens were harvested in groups of eight or 10. The farmers caught the chickens, placed them in crates, and put the crates on the truck. The harvesting was typically complete at 11 p.m. or midnight.

Punla personnel usually recorded the number of chickens harvested and attested to the truth and accuracy of the information. A copy of the document was then given to BAVI. To verify the weight of the chickens, a representative from the farmer group joined the truckers on their way to the nearest dressing plant to witness the weighing of the truck. The truck was weighed twice — upon arrival at, and departure from, the dressing plant. (See **Appendix C** for harvesting for the dressed chicken market).

iii Checkers were staffers that were assigned to monitor and record the volume and weight of chickens.

Trouble Ahead?

With a system in place, Baticados went ahead with expansion into the rural towns of Luisiana and Siniloan. Manok Mabuhay operations in Luisiana and Siniloan had been going well. However, during the third growing cycle, the project veterinarians presented a performance report that revealed a sudden drop in the HRR and an increase in the FCR of many farmers.

Status Report

Baticados reviewed the operations of Manok Mabuhay to trace the cause. As he went over the performance reports, he noticed a strong correlation between the length of the growing cycle and the HRR and FCR — the longer the growing cycle was, the lower the HRR, and the higher the FCR. HRR is the net number of chickens harvested less the mortality rate (the number of chickens that die during the growing cycle) and rejection rate (the number of chickens that fail to meet the minimum harvest standards). FCR refers to the feed consumption efficiency or the amount of feed in kilograms that is needed to attain a 1-kg gain in the weight of a chicken. A low FCR signifies efficient feed consumption. Baticados thought that looking into the methods of harvesting could provide answers to these problems.

Harvesting for live sales involved a longer growing cycle to achieve the required minimum weight for chickens. This was more labor-intensive than harvesting for the dressed market, due to the higher weight requirement. It was difficult to catch and carry 15 kg of chickens over and over. Imagine harvesting 1,000 chickens! It was also time-consuming because the chickens had to be weighed on site.

In addition, Baticados observed that when the growing cycle was longer, the number of chickens that were unaccounted for was higher. “Unaccounted for” referred to unexplained disappearances. Possible causes of these disappearances were unreported mortality, theft, and illegal sale or consumption by growers. BAVI imposed a penalty equivalent to Php 60/kg (USD 1.4/kg) for every chicken in this category.

A longer growing cycle resulted in a higher FCR because more feed was needed to grow the chickens to achieve the standard ALW. A positive about harvesting for live sales was that the weight of the chickens was known at the farm site. So, farmers did not have to guess the total weight and ALW of their chickens, a basis for computing their net earnings.

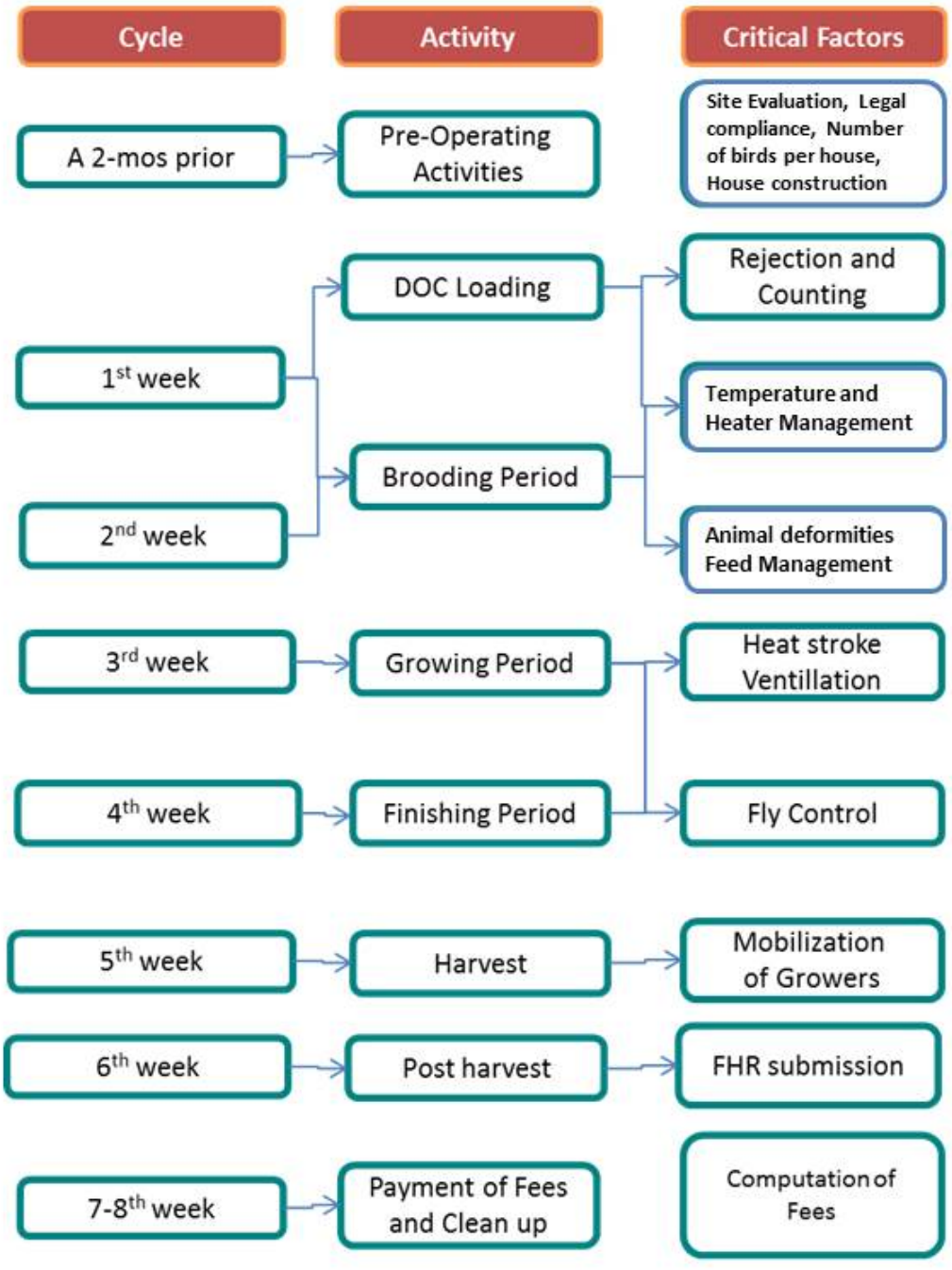
On the other hand, when harvesting for the dressed chicken market, Baticados noted that the number of chickens that were unaccounted for and the FCR were lower due to the shorter growing cycle. Operationally, it was also easier and faster to harvest for the dressed chicken market because the chickens were not as heavy and did not have to be tied and weighed at the site.

What to Do?

After reading the status report presented by the project veterinarians, Baticados sat down and thought about how to address the problem. He wondered if harvesting solely for the dressed chicken market was a good way to address the operational difficulties and poor farmer performances. He was not sure what implications this decision would have on the project’s bottom line. Harvesting for the dressed chicken market could require investments in bird crates, which would be expensive. How many crates would Manok Mabuhay have to buy? (See **Appendix D** for a quote). Where would the crates be stored? Would it be best to stay with the status quo and continue to grow chickens for both the dressed and live sales markets? These questions lingered in his mind. He had to find answers to these questions before the next operations meeting. (For additional insight, see **Appendices E-H**).

Appendix A

The Manok Mabuhay Growing Cycle



Source: Manok Mabuhay

Appendix B

Harvesting for the Live Sales Market

Source: Glenn N. Baticados

Appendix C

Harvesting for the Dressed Chicken Market

Source: Glenn N. Baticados

Appendix D

Live Chicken Crates Quote

HALCYON **AA Agrix Internationale**

Main Add : 105 B Harvard St. Cubao, Quezon City, Philippines 1103
Telephone : (632) 913-4018
Tel / Fax : (632) 438-0631
Cellfone No/s : (0917) 480-4305/(0922) 8135304
Website : www.halcyon.ph

Booking Ofc : Kalambagohan cor Burgos Sts. Cagayan De Oro, Philippines
Cell No/s : (0917) 480-4305, (0922) 813-5304
Email Add : agrix@halcyon.ph

ATTENTION : **MR GLENN BATICADOS**
Social Enterprise Manager

DATE : January 5, 2010

R E : Quotation on Live Chicken Crates (Transport crate).

Listed hereunder is our proposal in accordance to your requirement, as follows:

Qty	Unit	Description	Price	Total Price
600	pcs	Live Chicken Crates (Heavy duty Transport crate) - can accommodate 10 to 12 birds per cage	1,700	**PhP 1,020,000.00**

All prices are vat exclusive.

TERMS OF PAYMENT: *50% downpayment and 50% upon delivery(as per agreement)*
- Strictly no cancellation of purchase order.

DELIVERY & SHIPMENT: Can be delivered if more than 100 pcs.

VALIDITY OF OFFER: Price is based on today's procurement and may change anytime without prior notice.

Thank you very much. We hope that you find our proposal worthy of your valuable consideration.

Thank you

MR. HAMVENDYE C BOQUIREN
Technical Sales Officer

Conforme: _____
Signature over printed name

Source: Halcyon

Appendix E

Comparison of Harvesting Operations

Harvest Tasks	Dressed Chicken Harvest	Live Sales Harvest
Weight of chickens	1.30 kg-1.40 kg	1.70 kg-2.0 kg
Harvest bundle	Harvester can carry 10 birds per trip.	Harvester can carry 10 birds per trip, but birds are weighed in groups of 20.
Speed of harvest	3 hours	4 hours
Assembly (bringing birds near the side of the road in a temporary holding net).	Not required	Yes
Catching	Yes	Yes
Tying using plastic straws	Not necessary	Yes
Transport from holding pen to the digital weighing scale.	Not necessary	Yes
Weighing	Yes (only a sample — 2% of population)	Yes
Transport from the scale to the viajeros waiting at the side of the harvest truck.	Not necessary	Yes
Transport from farm houses to bird crates.	Yes	Not necessary
Recording number of birds harvested and rejected.	Yes	Yes

Source: Glenn N. Baticados.

Appendix F

Comparison of Growers' Fees

	Dressed Chicken Harvest	**Live Sales Harvest**
Net Grower Fees	Php 5.405	Php 4.885
	USD 0.126	USD 0.113
	DP Harvest (all in)	**LS Harvest(all in)**
Average Grower fees Per Cycle	Php 170,338.60	Php 155,562.80
	USD 3,961.36	USD 3,617.73

Source: Glenn N. Baticados

Appendix G

Costs of Crates

10	Birds per crate
5,000	Volume of birds harvested on a regular day
500	Crates per truck per day
Php 1,700 (USD 39.53)	Cost per crate
Php 850,000 (USD 19,767.44)	Total costs

Source: Glenn N. Baticados

Appendix H

Computation of Depreciation Cost of Harvest Crates

			Depreciation	
Total Cost	**Lifespan**	**Annual**	**Monthly**	**Per Cycle**
Php 850,000	3 years	Php 283,333	Php 23,611	Php 47,222

Source: Glenn N. Baticados