







INCLUSIVE POULTRY VALUE CHAIN TALKING POULTRY JANUARY - APRIL 2021



FROM THE TEAM LEADER'S DESK

IPVC Team leader Joseph Matiza

It is with great pleasure that we share with you our first edition of the IPVC quarterly newsletter, which seeks among other things to showcase the IPVC project activities, results and impacts. The publication also offers a platform for private and public partners in the poultry value chain to interact.

The IPVC project is an EU funded 3-year program under the ZAGP consortia, beginning February 2019 and scheduled to end January 2022. The project has six major objectives. These are; establishing poultry business associations, reducing poultry production cost, improving poultry productivity, promoting green technology adoption in poultry production system, awakening poultry value chain actors to Decent Rural Employment expectations in their course of action and promoting an enabling and regulatory environment for the poultry value chain.

Under the enabling environment objective the action seeks to organise producers for advocacy and amplification of the farmer voice in the Zimbabwe Poultry Association, which is a body which brings together, the key actors in the poultry value chain, namely the stock feed manufacturers and DOC breeders. As it stands, the voice of the producer, in particular the Small and Medium producers who contribute over 50% of

all poultry production in the country has often been missing, thus risking SMP interests.

The IPVC targets to work with 7500 small holder producers during the course of action and has so far reached close to 5000 beneficiaries with the various project activities and 2000 of these producers have joined and become full members to the established poultry business associations across the country, benefiting from services offered therein.

What gives us more joy is the high proportion of women - 70% who constitute the project beneficiaries buoyed by the low barriers to entry and exit into poultry production and the rapid payback period as compared to other livestock value chains. During this quarter in the month of March, on celebrating the International Women's Day (8th March), IPVC celebrates the small-scale women poultry farmers who are working tirelessly and earning a living through poultry enterprises. In the process providing meat and table eggs for food, nutrition and income insecurity. We are stronger together!

Enjoy the reading.











FARMERS GAINING BIG THROUGH POULTRY BUSINESS ASSOCIATIONS

The project has established poultry business units in each cluster, which act as administration and coordination units for collective action for SMPs in the respective clusters. The Poultry Business Association (PBA) enables organized poultry farmer groups to gain economies of scale and scope to access extension, inputs, financial and market services in a more convenient and profitable manner. The PBA has four main value propositions, which are: reducing cost of production, increasing revenue, leveraging on service, and act as conduit for offering training and poultry information services. The PBA is owned, managed, and provides services to the farmer members.

The lockdown and COVID-19 pandemic did not stop progress on the IPVC project as the action successfully launched Poultry Business Associations in all the 5 clusters, namely, Bulawayo, Masvingo, Gweru, Mutare and Harare. Registrations to join the various PBAs is ongoing across all clusters. Ultimately, the PBAs will be registered as co-operative companies in line with the Bulk Purchase Benefit Scenario country's company's Act.

PBA Membership

The PBAs are targeting to have a membership of at least 500 farmers per each PBA by the end of 2021 and so far, the PBA membership are as follows:

Masvingo	471 members.	147 Males and 324 Females
Midlands:	353 members.	117 Males and 236 Females
Matebeland:	232 members.	81 Males and 152 Females
Mutare:	461 members.	125 Males and 336 Females
Harare:	452 members.	176 Males and 276 Females

PBA Profitability

Through the bulk purchase of feed and day-old chicks at the IPVC established Poultry Business Associations, small to medium producers of poultry have been empowered to run their enterprises at a profit. The PBAs have established input supply partnerships with National Foods, Windmill Zimbabwe for bulk feed supplies; Kudu Creek, Irvine's, Masvingo Chicks and Super Chicks for day-old chicks' supplies. The bulk purchases arrangement has seen farmers saving up to US\$2.50c/bag of feed and improved reliability of chick supplies to farmers.

A 50 kg bag Retail price on average is \$26.60. The 50kg bag is sold at the PBA at a discounted selling price of \$24.25. Therefore, discount per bag = \$2.35. PBA benefit retention = \$50c per bag and ultimately farmer benefit retention =\$2.35-0.50c= \$1.85 per bag.

Bulawayo				Harare			
Feed Line	Mkt Price	PBA Price	Saving/50kg	Feed Line	Mkt Price	PBA Price	Saving/50kg
Broiler Starter	US\$29.21	US\$26.50	US\$2.71	Broiler Starter	US\$28.00	US\$26.20	US\$1.80
B/Grower	US\$28.70	US\$26.00	US\$2.70	B/Grower	US\$27.50	US\$25.75	US\$1.75
B/Finisher	US\$28.17	US\$25.50	US\$2.67	B/Finisher	US\$27.00	US\$25.30	US\$1.70
Early Lay	US\$25.04	US\$23.00	US\$2.04	Early Lay	US\$24.00	US\$22.35	US\$1.65
Mid Lay	US\$24.52	US\$22.50	US\$2.02	Mid Lay	US\$23.50	US\$21.90	US\$1.60
Late Lay	US\$24.00	US\$22.00	US\$2.00	Late Lay	US\$23.00	US\$21.45	US\$1.55

Price Comparisons









The PBAs have assisted small scale farmers in accessing day old chicks especially during the peak demand periods where most Small-scale producers fail to access Day old broilers. Weekly the PBAs are selling to members on average 1000 broiler day old Chicks.

PROMOTING LOCAL FEED PRODUCTION



The thrust of the IPVC project is increased profitability for the SMP. The project looks at profitability as a function of cost reduction more than other relevant parameters. In this respect, the project has supported at least 20 lead farmers in different clusters with inputs to produce raw materials for feed (maize and soya beans). Given the fact that poultry feed constitutes 70-75% of the production costs, the project is piloting localised feed production model to demonstrate to SMPs how to reduce feed costs. The project therefore engaged animal nutritionist experts to assist farmers with feed formulation software, manuals and the actual practical trainings to empower farmers with the relevant skills in this regard. Through these on-farm feed formulations, farmers have been reducing their production costs by 20-30% depending on the line formulated. These feed formulations have been done mostly for broiler feed lines and the project through the Poultry Business Association members, engaged Feedmix laboratory for testing of the formulated feeds. The results were quite amazing with minimal adjustments recommended for the laboratory. To further support this component, the project has just procured mobile feed units with a production capacity of 0.4 metric tonnes per hours (4MT/8-hour day). The millings units include the hammer mill, vertical feed mixer and the pelletizer. If this pilot proves to work as envisaged by the project, scale interventions may be considered.



Tafadzwa Charumbira inspects his formulated feed before lab testing Farmers are now in the process of harvesting these crops which will be used to make feed for their birds during and after feed formulation trainings. Poultry feed constitutes 65-70% of the farmers cost and by making their own feed farmers can reduce their cost by as much as 5%. The project will ensure that productivity is not compromised in the process by carrying out practical feed formulation at the farmers homestead. A total of 10 feed formulation trainings are planned for each cluster for this harvest period.

From Goromonzi ward 22, Tafadzwa Charumbira joined IPVC with 3000 broilers and has moved up to rearing 5000 broilers. He piloted the IPVC localized Feed formulation program in 2020. For his first batch of 3000 broilers, he formulated 10.5tonnes of feed. His second batch of 4000 broilers saw him formulating 14tonnes of feed and for his third batch of 5000 broilers, he formulated 17.5tonnes of feed. Included in the ingredients used were crushed maize, sunflower seed, and milled soybean. The formulated feed was both for starter grower and finisher for the said batches. Samples of the formulated feed were sent for lab testing at FeedMix and were approved with flying colours. Mr Charumbira manages to make a saving of US\$160 per every tonne of feed formulated. Currently he is training about 30 farmers in his community to formulate their own feed with available resources/crop around the homestead.

GREEN TECHNOLOGIES IN POULTRY PRODUCTION

The project is contributing to inclusive green economy in Zimbabwe by piloting with poultry value chain actors the use of green technologies in poultry production. To date, the project has successfully installed 24 green technologies which include 4 x 20 cubic metre fixed dome and tubular biogas systems for heating, 5 solar lighting systems and 14 solar powered incubators. The solar lighting systems and incubators are now fully functional, while some of the biogas systems await commissioning. Installations of more green technologies is currently underway mainly targeting lead farmers and producer group across all the clusters.



BIOGAS SYSTEMS

The biogas systems are to be fed with waste daily to avoid any glitches in functionality. Waste fed includes any biodegradable waste around the household and other livestock waste including chicken waste. The biogas systems have a heating capacity for 5 000 chickens.

"With the inception of the bio-digester, we are looking to make a saving of about 20c per bird. We were running our cycle with











200 bags of charcoal at \$10 per bag. Substituting with gas availability of lighting in poultry housing units and had proved produced by our own bio-digester will provide a huge saving at day 35, making our birds more affordable and more frequent power cuts. The solar lighting systems' sizes are



competitive on the market" said Nyamanjiwa our lead farmer from Murehwa ward 9.

Nyamanjiwa had a fixed dome biogas system installed and



tested at his farm. The test proved that the system was working perfectly and was given a green light to place his dayold chicks.

"We have been capacited to go further and if this biodigester really works, even after the project ends because with our savings, we can now construct another bio-digester to cater for more production should we intend to increase our number of birds per cycles." Nyamanjiwa added.

PHOTOVOLTAIC SYSTEMS

Our solar lighting systems aim to improve access and

Photovoltaic lighting system installed at John Kandwe's farm in Norton











availability of lighting in poultry housing units and had proved to be ideal for producers that are off-grid and in areas with frequent power cuts. The solar lighting systems' sizes are dependent on the size of the poultry farm. Improved lighting in poultry production especially in commercial layers acts to artificially increase day length and this stimulates increase in egg production.



"After receiving the solar system, my batch of 1000 layers which was at the end of its cycle and ready for the market continued producing eggs". Said Clever Manonga, our leader farmer from Guinea Fowl, Gweru.

Manonga received a photovoltaic lighting system for his batch of 3 000 layers.

"I have layers nearing the end of their cycle, and were supposed to be at 65% production, but the introduction of the lighting system kept the production rate 85%" Manonga further



Manonga showing off his egg production

alluded.

Mr Manoga plans to get the eggs tested for calcium in the event that egg production for this batch continues at such an unusual rate for layers at the end of their cycle.

Chiedza Chikukwa a small-scale poultry producer from ward 10 of Masvingo district was supported with a photovoltaic lighting system from the project through the Golden Poultry Association.

"Although I am an Agritex officer by profession, I did not know many things about poultry including biosecurity measures, some diseases and methods of controlling these diseases. I used to incur losses due to egg breakages and mortality before the intervention of IPVC project". said Chikukwa.

The solar lighting system aims to increase the hours of day



Chiedza Chikukwa in her fowl run

light in the poultry house. Following the solarisation, the number of crates produced per day increased from six to eight. Before the solar system, she was using electricity as a main source of power for her fowl run therefore she would switch off all the lights during the night due to pricey electricity charges.

Benjamin Tesa, aged 47, of ward 24 in Matobo district, does egg production (layers) and broiler production. Benjamin has been in poultry farming since 2012 and his market includes Victoria Falls and Hwange (Hotels & Restaurants), local market, Bulawayo, Plumtree and Maphisa. He has a capacity of keeping 3000 layers and 6000 broilers.

Inadequate power suppliers due to load shedding and power cuts as a result of faults and vandalism as well as increasing feed prices forced Mr. Tesa to scale down from 3000-layer birds to 1000 birds per cycle. The challenge also resulted in him picking between 18 and 19 crates. As a substitute to electricity he tried to use a generator, but the cost of fuel made it uneconomical. The COVID 19 pandemic and the subsequent lockdown negatively affected the tourism industry which led to scaling and shutting down of most of the hotels and restaurants in Victoria Falls and Hwange, ergo shrinking Mr Tesa's major market, forcing him to scale down his broiler production.

Through the IPVC Matebeleland Association, Tesa received a 3.5Kv Photovoltaic Lighting System as a demo for other



Photovoltaic System Installed At Benjamin Tesa's Farm



"Now with a constant power supply, I have seen an increase in egg picking ranging between 24 and 26 crates and I have also bought an additional 2000-layer chicks" said Tesa. His profitability has increased by 10%.

Incubators

The installation of solar powered incubators has assisted farmers with easier access to hatching facilities at a lower price. Mechanical hatching over natural hatching has an advantage that it improves productivity in birds as hens



Rosemary Madzivo and other farmers receiving the incubator

quickly go back into laying as they do not need to spend time brooding the eggs. With no interruptions to incubator power supply, mechanical hatching has high hatchability as compared to natural hatching. In some of the clusters where producers benefited with solar incubators, farmers had been traveling long distances to access hatching services, thereby incurring high transportation costs.

"Before, we were taking eggs to Harare for hatching at \$4 per crate and \$6 transport costs. Now we are hatching at no transport costs and at \$2 per crate. We are now making a profit". Said Rosemary Madzivo from Zvimba ward 25. Rosemary is part of a group of 25 farmers from Zvimba who benefited from the installation of a solar powered incubator. The incubator has a capacity of 520 eggs.

REVOLVING FUND FOR ACCESS TO POINT OF LAYS.

With a reported shortage of Point of lays (POLs) on the market and the high prices thereof averaging above \$9, IPVC project



POL location at Laina Lemeyu farm in Norton











introduced a POL revolving fund to address this high cost and enterprises. the unavailability of POLs on the market. These POL birds will be sold to PBA members at \$6 per bird. Members are expected to save about \$3 per every point of lay bird purchased relative to prevailing market prices. Due to the high demand, each association member is expected to buy a maximum of 400 point of birds, so that the project reach is wider. The first batch of 7200 POLs will be available in mid-June, with the second batch of 5000 POLs expected to be ready mid-September 2021. Let's do the maths, how much is the farmer saving by buying as an association member? 400 point of lays are costing 400*6.40 =\$2560, against market price 400*9 =\$3600, that's a whopping \$1040 saved. The proceeds from any sales under this model are used to secure the next batch of layer chicks and the revolving model is sustained. Farmers may then choose to stimulate egg demand through lower selling price of eggs, leveraging on the lowered costs of production, thus remain competitive on the market.

Producers that effectively combat disease incidences on flocks are likely to record better profitability, than those who do not. In addition to extension visits and trainings, IPVC, has facilitated the establishment of a revolving fund for vet drugs and vaccines was mobilized to ensure a last mile distribution of poultry medicines and vaccines at discounted prices. Vet drugs sold under this model are 15% cheaper relative to market price. Beyond just cheaper prices, the fund is promoting farmers to vaccinate their birds. There is a current trend of farmers not vaccinating chickens, particularly broilers and indigenous chickens. Generally, most poultry farmers associate vaccinations with layer chickens. Reasons cited included non-availability of vaccines in nearby poultry shops, the vaccines vials are sold for a large quantity of birds which is beyond the holding capacity of most SMPs and an unavailability of cold chain facilities to support the storage of vaccines at farm level. PBA poultry shops are now one-stopshops for farmers, providing a wide range of poultry inputs to include vet drugs and vaccines. The PBA thus enables farmer group purchase of vaccines, enabling economies of scale and scope to SMP vaccine access.

REVOLVING FUND FOR VET DRUGS

Pests and diseases are of economic importance in poultry

IPVC GOES DIGITAL

The Inclusive Poultry Value chain project has developed 3 different digital applications to help poultry farmers in their enterprises.

Kurima Mari Poultry App













Poultry Information Management Systems (PIMS)	 Report generating system, providing an analysis of the poultry sector. Data collection system which allows different users (farmers, integrators, associations) to upload data on production and performance from different sources. The Roll out of the system will be done in 5 clusters, Gweru, Harare, Mutare, Bulawayo and Masvingo reaching 10 000 poultry famers and integrators and all 5 poultry business associations along with the Zimbabwe Poultry Association.
Outgrower App	 Records bird weight, feeds, eggs, helping contractors and farmers track the performance of their flocks. Has alerts and messaging features Help farmers compare the performance of their flocks to the optimal performance of poultry in terms of feed conversion ratio, weight, mortalities and laying rates. The Roll out of the app will be done in outgrower schemes around 5 clusters, Gweru, Harare, Mutare, Bulawayo and Masvingo reaching 4200 contracted poultry famers.



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