

REPORT ON TRAINING OF PIGGERY ENTREPRENEURS AT CENTRE OF LEARNING , KNOWLEDGES & SERVICES, MAWLAI – UMSHING

The Meghalaya Institute of Entrepreneurship (MIE), in collaboration with Centre of Learning, knowledge & Services (COLKS), organized a 10 days training programme on Piggery Farming & Value Addition of Pork to the entrepreneurs of the EFC partners, East Khasi Hills District w.e.f. 16th – 25th November 2015, at Centre of Learning, Knowledge, & Services (COLKS). The objective of the training is to promote livelihood through piggery farming as an enterprise. This first batch was (list enclosed) received in the training Centre, registered, welcomed to the training hall for introduction and further training as per scheduled.

Day – 1: 16th November, 2015

Inauguration Speech by Dr. B. Lyngdoh:- He told the trainee that this is the First Piggery training to be undertake with private institution i.e. the Centre of Learning's Knowledge Services, Mawlai, since September 2013 training have conducted in State Institute of Rural Development Nongsder, Vocational Training Centre Kyrdekulai, Rongkhon etc. Most training is theory classes with no practical at all. This training institute has agreed to provide half day theory and half day practical as in the case of Apiculture Mission. In livestock half day may not be sufficient as restraining the animal for various purposes take a lot of time but this training will give us the insight how to make the training useful for the livestock keepers or poultry rearers, the trainee will be learning how to do various Deworming and preventive prevention can be done by the farmers themselves as in the case of Poultry Farmers, without waiting the assistance from others sources

Introduction & breaking ice session Dr. H. S. Shylla:- Informed after retirement from Government service as Deputy Director, Regional Pig Breeding Farm Kyrdekulai, its gives him immense pleasure to be part of the Centre of Learning Knowledge services for imparting his knowledge to the rural farmers of the state. Interaction with the trainees most of them wonders how 10 days piggery training could be carried out as most training are of 6 days duration only, be in RRTC/VTC/SIRD/NIRD etc and how piggery farming can bring changes to one's financial status .Pork consumption is very high in the whole of Meghalaya. As such piggery farming/enterprise is a good job opportunity & will be a continuous source of income



Introduction to Piggery Enterprise by Dr. B. Plain:-He informed the trainees the difference between piggery farming and Piggery Enterprise, we saw the word enterprise plenty in the shops where we purchase grocery items etc but none was written on Pig farm, Poultry farm, Cattle farm, Fish ponds, etc. In poultry we find the word Poultry Industry which equivalent to the word enterprises. When we say farm we never account all the expenditure, we reared one or two pigs how much we spend on them none of us maintain the accounts, at the end of the year we say rearing pig is profitable but actually we are running in lost even Government Pig farm never calculate the profit and lost but if the Sale of Pigs is equivalent to the cost of feed fed to Pigs the Government say the farm is making profit .But in real sense the pig farm is running in lost if Salary of staff is taken into account. when we talk about Piggery Enterprise we have to take into account the cost of pig sty, cost of pigs, cost of equipments, cost of feed, Medicines, Vaccines etc all these have to be recovered back from the sale of pigs with a net profit, though the cost of shed will take a minimum of five years to recover the cost. He suggest to maintained the records of expenditure and the records of sale if the record of sale is higher than the record of expenditure the piggery rearing is profit and can be term as Enterprise.

DAY – 2: 17th November 2015



Session on entrepreneur skill by Mrs. Alma Dohling, faculty SIRD:

The session provides inside on how to manage time effectively, proper training & being professional at what they choose to for a living. She also stress on how to utilize time by getting involve in livelihood promoting activities during off hours. She gave examples of Laitkyrhong smoked meat which is being sold door to door by the farmers to different parts of Shillong, etc. She stressed on the importance of being aware of locally available business. She also highlights the importance of the spirit of healthy competition in business by improving the quality, value addition services, introducing varieties & proper knowledge about the markets.

Pig farming as an Enterprise by Dr. K. Patgiri: - He informed that the Meghalaya Cooperative Apex Bank Shillong is ready to finance Pig farming.



The Meghalaya Cooperative Apex Bank is the only bank that does not require to bring along the detailed business plan to be enclosed along with the loan application if you can contribute 25% of the loan amount and the quantum of assistance the bank will prepare the detail plan as you wish, It is the only bank that finance Pig breeding cum fattening. No other bank offer this combination they up for breeding or fattening unit. The bank is ready to finance any pig enterprise and increase the quantum of loan if repayment is on regular basis.

Practical: Site selection, preparation, orientation of pigsty, etc., by Mr. E Kharkrang



Mr. E Kharkrang, Junior Engineer, PWD :

The resource person highlighted on the importance of selection of the area and site for pigsty construction. It must be accessible to essential services such as feed, feed storage, water, electricity, transportation, marketing of products etc., It should not affect the surrounding areas like for disposal of waste and be far from residential areas. He also explains that pigsty construction should be as per the climatic zone of the selected area in relation to wind, rain, sunshine, etc. If land permit the orientation of shed should be as practicable from east to west direction. Reading from the drawing is different from the actual measurement of the land, sloppy land give less area compare to the flat land.

DAY 3: 18/11/2015 - Concept of Enterprise & Entrepreneur



Dr. B. Lyngdoh, L.C., MIE – The resource person explains the meaning of Enterprise and the word entrepreneur. Enterprise is the place of work where every rupee is being calculated how much it generate extra amount after certain duration/month/year ,in the enterprise there is no loss otherwise it become a hobby where loss is not taken into account. Where as the one who work in the enterprise is call entrepreneurs where he would work hard enough to bring profit to the enterprise. Before making a place of work/Enterprise the entrepreneur will consider the following points about his ability etc.

1. **Strength :-** Including Enough capital to start the enterprise, his/her health status, land, road communication, water source, electricity connection etc
2. **Weakness:-** Include unable to market the produce that the enterprise generate, non available of technical advice, far from market area, none available of local traders etc.
3. **Opportunity:-** Produce locally consumed, huge market in the state,
4. **Threat:-** From outside the enterprise, from inside the enterprise which include disease, no proper management, timely repair not done regularly. Produces From outside the enterprise include from outside the state, natural calamity etc.

He also sensitized the trainees about the benefit & importance of value addition which is yet to be tapped by the people of the state as a whole.

PRACTICAL: MANAGEMENT OF PIGS, PIGLETS, RESTRAINING FOR CASTRATION,VACCINATION ETC. BY DR. H. S. SHYLLA



DAY 4: 19/11/2015 – INTEGRATED PIGGERY CUM FISHERY FARMING

Shri David Kharwanlang, Principal, Fishery Training Institute, Mawpun, is the resource person for the above topic. He gave the introduction about fish & fish farming with reference to Meghalaya. In brief, he lectured on the culturable fish species like catla, silver carps, rohu, grass carp, mrigal & common carp.

He said that 70% of pig waste is beneficial for fish as feed. The undigested solids from pig are good feed for Tilapia spp. He threw some light on the site selection & construction of fishery ponds- topography, soil type & source of water. The site should be on the catchment area with good soil type near the source of water with the potential to tap the runoff water. There are different kinds of ponds like nursery ponds, rearing ponds, stocking ponds for fingerling. Pond management practices like liming, manuring need to be done from time to time. While constructing pond for fish cum pig farming, one should consider the land slope for pig shed & the size of pig shed. The waste from 30-40 pigs is enough for one hectare of fish pond @10,000 fingerling/ha. The production of fishes by this method is 5.5-6.0 MT/ha/yr& for pigs is 4.2-4.5 MT/yr.



QUERIES:

- 1) What is the appropriate size & depth of pond for fish cum pig farming?

REPLY: Size is 0.2-2.0ha, Depth is 1.5-2m.

- 2) How much lime to apply at pond pre-treatment?

REPLY: 250-300 kg/ha by mixing lime powder with soil before it is filled with water.

- 3) Can the waste from pig sty be drained directly to the pond?

REPLY: Yes, but one need to check if the algae start to bloom then it should not be drained into the pond especially during cloudy days.

FODDER CULTIVATION & FEEDING LOCAL FEED & FODDER

This session was briefed by Mr. M. Nongsiej, Rtd. Asst. Director, Agriculture Department. The subject relates to the controlling of feed cost in rearing pig. To provide bulking vegetable means to provide:



- a) Natural food.
- b) Natural Vitamins.
- c) Bulk/Fibre/Starch/Stomach Fill.
- d) Offers texture & variety of food.

He described that our mother nature grows greens with varied vegetation in the country side & permits us free feed inputs for reducing 50% feed cost which is a significant money saving.

He also briefed some of the fodder crops that one can grow, e.g., sweet potato, colocasia, cow pea, cauliflower, cabbage, pumpkin, squash, etc.

In addition, he explained to the entrepreneurs of the natural medicines for the foddors/vegetables viz.,

- 1) Kynbat Germany = 7kg
- 2) Eit masi (Cowdung) = 7kg
- 3) Tricoderma = 1kg
- 4) Um pynjhieh masi (Urine) = 10ltr

PROCESS:

- 1) Mix them all & pack in a bag, then ferment it in 200ltr water storage.
- 2) Leave it for 3 weeks to get fermented.
- 3) This fermented water can be used as a medicine by spraying.

DAY 5: 20/11/2015

DISEASE & HEALTH MANAGEMENT OF PIGS

This topic was lectured by Dr. D. Sun as a resource person. Disease is a “particular abnormal condition, a disorder of a structure or function that affects part or all of an organism, associated with specific symptoms & signs. He said that it may be caused by external factors such as pathogens or by internal dysfunction such as auto immune diseases.

He informed that the source or cause of disease maybe:

1. **Infections:** Due to invading agents like bacteria, virus, fungus, protozoa, parasite, etc.
2. **Management:** Lack of care, sanitation, improper handling and management of pigs affecting **their** performance, stressors etc.
3. **Intoxication:** Due to overdose of medication, toxins in feed, manure, consumption of poisons.
4. **Nutrition:** Due to nutritional deficiencies of minerals and vitamins.
5. **Genetic:** Inherited from progeny.

The following points are to be considered necessary for ensuring the health management of pigs:

- Medicinal control of disease
- Eradicating of disease
- Recognizing of disease in the farm
- Clinical examination of the herd
- Assessing health, management and disease in farm
- Managing & treating sick pigs
- Designing a hospital pen/isolating pen
- Disposal of dead pigs
- Consultation of Veterinarians
- Training of attendants/staff (especially in management failures & disease)
- Use of records
- Planning for efficient production and disease control
- Nutrition and feeding
- Water
- Regular screening of different diseases by taken different samples done by Vets.

COMMON DISEASES OF PIGS, PREVENTION & CONTROL MEASURES

The session started when Dr. Ms. R. Kharbuli, being a resource person delivered a lecture on the above topic. The diseases in pigs are mentioned as below:



1. VIRAL

- Swine Fever/Pang Khlam)
- PRRS/Pang hap khun
- Swine Influenza/Pang Flu
- Foot and Mouth Disease/Pang Niangkhnapiiv)
- Transmissible Gastro Enteritis/Pang Pynhiar
- Swine Pox/Pang niangthylliew
- Japanese Encephalitis/Pang Khieshoh

2. BACTERIAL

- ii) Anthrax/Pang khlam
- iii) Pasteurellosis.
- v) Atropic Rhinitis/ Pang khmut
- vi) Swine Erysipelas
- vii) Swine Mastitis/Pang jymbuin

3. PARASITIC

A) Endoparasitism

- i) Ascariasis ii) Taeniasis iii) Trichinellasprialis infestation

b) Ectoparasitism

- i) Mange ii) Lice iii) Tick

4. DEFICIENCY DISEASES:

- i) Avitaminosis ii) Mineral deficiency iii) Piglet Anaemia

5. OTHERS:

- i) Retention of Placenta

The common diseases like Swine fever, PRRS, Anthrax, Brucelosis, Taeniansis, Ascaris, Mange, etc, were discussed briefly. She suggested all the possible preventive measures & management on how to tackle these diseases as follows:

- 1) By pigs from a pedigree & disease free herd.
- 2) Feed adequate ration to different categories of pigs.

- 3) Deworm the stock every quarter.
- 4) Vaccinate the pigs every year against diseases.
- 5) Adequate shelter, ample water supply to be done.

QUERY: How to procure good & healthy pigs?

REPLY: Any category of pigs should be bought from the nearest known good breeding farm.

PRACTICAL: Hands on demonstration how to reconstitute vaccines & routes of administration.
Demonstrated by Dr. B. Lyngdoh & Dr. H.S. Shylla.



DAY 6: 21/11/2015

DEMONSTRATION ON HYGIENIC PIG SLAUGHTERING

The session on hygienic pig slaughtering with the details of its step by step process was explained by Dr. H. SShylla with the help of videos in the class room. The trainees were thereafter, practically engaged in the slaughtering process by the resource person, Shri .K.J Kharlukhi. They participated and showed keen interest during the whole session.

PRACTICAL: Some photos during slaughtering process as depicted below:





DAY 9: 24/11/2015 SESSION ON RISK MANAGEMENT : The resource person on this subject was Ms. M. Myllemngap . She explained in general the definition of RISK to human being , animals, properties, plants, nature, etc . She continued the matter by clearly advice that when it was faced , the same must be identified, assessed, analysed and evaluate it. There arise its controle measures and managements. She informed that Insurance Companies ensures one way of solving risk was by " insuring ". In relation to particularly rearing pigs, all catagories could be insured as per rules and regulations specified. The lost due to diseases, death, etc could 80% be claimed. When suchcase arise , the following points are reguired ; - i) Death certificate from headman. ii) Post-Mortem Report from Vety Doctor. iii) Pig Ear-tag. Iv) Inform within 24 hours. V) All documents of pig-rearing / insurance, etc.

HANDS ON DEMONSTRATION FOR VALUE ADDITION OF PORK

Mrs.P. Wanshong, as a resource person took over the demonstration on the above subject. She explained that through kitchen preparation, pork can be used in various types of fooding. The organs like liver, lungs, kidneys, intestine, heart, spleen etc by mixing with ingredients like chilli, masala, garlic , ginger, pepper can be cooked as a sausage. The parts like ears, tongue, brain, or pork meat, etc can be cooked and prepared as dohkhleh, achar, dohjem, etc (khasi dish). All the trainees were practically engaged during the session, and expressed keen interest in this system of cooking ideology for uplifting income generation. These are some of the photos during the session:



DAY 10: 25/11/2015

ESTABLISHMENT OF CLEAN PORK SHOP AS PER FSSAI GUIDELINES



MS DBS Mukhim, Asst. Commissioner, was the resource person & has explained briefly the above subject. As per the Food Safety Act, 2006, A) Cleanliness is right from the: i) Water ii) Place/spot iii) Slaughtering iv) Transferring/ Transporting to shop. B) i) Presentation, etc. She informed that any unsatisfactory performance may lead to punishment as per section 56 for Rs. 5lakhs. Any unwanted or expired item found or sold may lead to a fine of Rs. 2lakhs. Also, she informed that preservation or storage must be done with the help of ice or a refrigerator, etc.

The shop owner must register for availing the shop license. The documents required for registration are:

- a) Epic.
- b) Two photo copies.
- c) ST Certificate.
- d) Declaration.
- e) Medical Fitness Certificate.
- f) Rangbah Shnong Certificate.
- g) License Fees to be paid Rs. 2000 per annum.

EVALUATION & VALEDICTION

The training programme of ten days came to an end successfully. Throughout the training course, lots of experiences were learned for improving the system of training. The cooperation of all the partners/trainees, resource persons etc, has shown positive effects for the next ongoing programmers to progress in better ways.

