

## The Implementation of Intensification Native Chicken to Increase the Fishermen Income

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**Abstract.** Fisherman family in coastal area is one of the groups who raise chicken in general, because it is easy to take care, even though it is still in extensification level. Approach methodology used is bay: (1) Speech and discussion on potency, prospect, and benefit of raising chicken, (2) demonstration and guidance for working chicken coop, ration formula, tetelo vaccination and choosing a new generation, (3) guidance of raising Native chicken, time after harvesting and marketing, (4) forming a raise chicken group in order to discuss in development of business and carrying out their problem. Speech and discussion material presented is positively responded and satisfactory to the participants because there has not yet been carried out such this program. Generally, the participants wanted to adopt and they were active in demonstration on choosing new generation, ration formula, prohibition of disease, taking care of chicken, making of coop and equipment, timing of harvesting and marketing. It would be concluded that the participants who came from Kelurahan Nambo is very enthusiasm and active in this program. Generally, the participants wanted to raise chicken as a primary job as well as their fishing business

**Keywords:** Intab, Chicken, Income, Fisherman

**Abstrak.** Kelompok masyarakat pesisir merupakan salah satu kelompok masyarakat yang pada umumnya senang memelihara ternak terutama ayam buras, karena mudah pemeliharaannya meskipun masih dalam taraf ekstensif. Kegiatan penerapan ipteks ini dilaksanakan di Kelurahan Nambo Kecamatan Abeli Kota Kendari. Metode pendekatan kegiatan yang dilakukan adalah dengan cara: (1) ceramah dan diskusi mengenai potensi, prospek dan manfaat beternak ayam buras, (2) demonstrasi dan pembimbingan pembuatan kandang ayam, cara menyusun ransum

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*dan cara vaksinasi tetelo serta pemilihan bibit yang baik, (3) bimbingan cara beternak ayam buras, teknik pasca panen dan pemasaran, dan (4) pembentukan kelompok peternak untuk memudahkan mereka berdiskusi dalam rangka mengembangkan usaha dan mengatasi permasalahan mereka. Materi penyuluhan yang disajikan mendapat respon positif dan cukup memuaskan dari para peserta mengingat selama ini belum pernah dilakukan kegiatan serupa. Umumnya para peserta ingin mengadopsi materi penyuluhan dan mereka sangat aktif dalam demonstrasi tentang pemilihan bibit, penyusunan ransum ternak, pencegahan penyakit, tata laksana pemeliharaan, pembuatan kandang dan peralatan, teknik pasca panen dan cara pemasaran yang menguntungkan. Disimpulkan bahwa para khalayak sasaran yang terdiri dari para masyarakat di Kelurahan Nambo sangat antusias dan aktif dalam kegiatan pelatihan/bimbingan penerapan paket teknologi ayam buras. Secara umum para peserta pelatihan berkeinginan untuk menjadikan usaha beternak ayam buras sebagai mata pencaharian pokok disamping usaha nelayan mereka.*

**Kata Kunci:** *Intab, Ayam native, Pendapatan, Keluarga nelayan*

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## 1. Introduction

Native chicken is a type of poultry that has long been farmed by the community, in cities and villages. The benefits of domestic poultry are quite significant for the community in increasing family income by selling chickens, eggs and manure, as well as fulfilling family nutrition by consuming chicken or eggs. In addition, domestic poultry can utilize domestic waste in the form of kitchen scraps [1][2][3][4].

The fishing community group is a group of people who love raising chickens, because they are easy to maintain even though they are still in an extensive level. The weakness of the extensive system is that the maintenance system is traditional and the absorption of chicken breeding technology has not been popular in the community so that when an outbreak occurs, the population will decrease. This condition causes the community, especially those who have an interest in raising chickens to become uninterested.

The business of Native chicken is of special value where the main goal is to achieve good results, and this can only be achieved if the selection of seeds, processing (care), disease control, food factors and so on are really addressed. Good seedlings and superior quality but other supporting factors are less supportive, will not give the expected results [5][6][7][8].

The application of the INTAB package is intended as an effort to improve how to manage free-range chicken farms at the community level. The improvement program is in the form of seed selection, disease control, healthy housing, proper feeding, post-harvest processing and business management and marketing [9][10][11].

The activities carried out aim at introducing and applying the intensification chicken technology package (intab), so that it can be developed in the community, especially in fishing.

## **2. Method**

### **2.1 Problem solving framework**

Native chickens are generally already familiar with community life, especially with people in fishing areas. The low knowledge of the fishing community on how to manage poultry is one of the factors that cause the low productivity of chickens. However, if managed in accordance with good management methods, farmers can be guaranteed to obtain far better results. This will eventually be able to open new employment opportunities while increasing income for rural communities.

This encourages the need to offer an appropriate technological innovation in the field of chicken farming in the form of efforts to implement the intensification of chicken technology packages (Intab), especially to the fishing communities in the coastal city of Kendari.

### **2.2 Realization of problem solving**

In accordance with the problem-solving framework that has been formulated, the method of approach to the activities undertaken is by:

1. Lecture and discussion about the potential, prospects and benefits of the community in raising native chicken.
2. Demonstration in the application of technology for intensification of Native chicken
3. Guidance for raising chickens intensively until after harvest and marketing.
4. Provide opportunities for the spread of business innovation intensive free-range chicken farms to other communities by way of forming farmer groups.

### **2.3 Target audience**

Members of the community groups that were targeted by these community service activities were fishermen and local residents in Nambo Village, Abeli District, Kendari City. Farmers who are interested in domestic poultry farming business, especially to productive age groups who are interested in this activity.

## **2.4 Method**

Community service methods used are counseling methods, practices and assistance as has been done in previous activities [12].

1. Following counseling in the form of lectures on the technology of intensification of Native chicken.
2. Following the demonstration of making cages that meet the health requirements of livestock and humans around them.
3. Following the demonstration making brood stock, perch and nest.
4. Following the demonstration of disease control by conducting treatment and prevention of diseases, especially tetelo and bird flu (Avian Influenza) by vaccinating tetelo and AI.
5. Following the demonstration of livestock ration counseling that meets nutritional and production requirements, both in the starter, grower and layer periods.
6. The intensive farming practice starts from selecting good seedlings from hatchery to harvesting the results.

## **3. Result and Discussion**

The implementation of community service activities will be monitored and evaluated by the LPPM to determine the indicators or the level of success of the activities and jointly find a solution if obstacles are found. Evaluation of activities will be carried out by a team of community service institutions in Halu Oleo University together with the activity implementation team.

- Evaluation of non-physical activities is to see the level of understanding, participation in each activity, discussion and follow-up plan of the participants. At the end of the activity a questionnaire will be distributed to each participant. Solutions will also be sought for possible constraints faced by participants in applying the results of training activities.
- Evaluate physical activities by looking directly at the package of activities carried out based on the achievement of targets according to the specified schedule, the number of active participants, the level of understanding of participants and acceptance of the methods of raising native chickens are taught.

The results of the evaluation are reported periodically through the progress report of the activity, the level of achievement of targets and the final report of activities and the possibility of publication. The final report will be completed with photos of the activities. Monitoring activities will still be carried out even though this project has been

completed and will be made into community livestock business by the Halu Oleo University Community Service Institute.

The results obtained in community service activities in Nambo Village, Abeli District by the Faculty of Animal Science Team of Halu Oleo University can be described as follows:

1. The trainees who are generally fishermen and the surrounding community are very responsive to the information provided. This is evidenced by their participation in counseling activities and demonstrations on intensification of free-range chickens and a series of subsequent activities.
2. The participants of the training were very active in adopting the demonstration material, this is evident by their activeness in making chicken coops, all of the trainees simultaneously modeled on the demonstration cages. They prepare their cage materials independently, with the model of the cage modeled on the model given.
3. The trainees were very responsive in following the demonstration of tetelo and bird flu vaccinations and how to treat sick chickens, how to prepare feed ingredients and preparation of animal feed, how to select chicken breeds, how to harvest and how to market chickens.
4. The trainees are always actively discussing and asking things they do not know
5. The trainees are ready to raise Native chickens and plan to make chicken farming a business
6. To facilitate the coordination of fellow farmers, both in terms of business management and marketing of livestock, they have formed farmer groups consisting of 10 members with one person as its chairman.
7. The trainees and the community around the training location have requested and expect the willingness of the Faculty of Agriculture Team to provide further guidance, especially as a vehicle for their friends / discussions in raising chickens.

The material presented received positive response and was quite satisfying considering that so far there had never been a similar activity. Even though the people of Nambo Urban Village generally raise Native chickens, even though they are still traditional in nature or are kept only on the side.

Question and answer between the Implementation Team and the target audience, who are generally members of the community, took place after counseling and

demonstrations. The lecture material focused on the potential of Nambo Village in the development of free-range chicken farming, the benefits that can be obtained from free-range chicken farming, development prospects and market opportunities, generally attracted the attention and enthusiasm of the participants.

Participants were very interested in attending lectures and demonstrations on how to prevent disease through ND (tetelo) and Avian Influenza (bird flu) vaccinations, which are generally the most common constraints they face in raising chickens. They are very interested in being taught how to choose and arrange healthy and quality feed ingredients for their chickens, especially those that are widely available around their villages. Participants were also interested to be taught how to make a healthy cage but safe from wild animal attacks (dog and lizard attacks), so far they only let chickens sleep in the columns of the house perched on the tree.

The initial stage of the demonstration material is to teach prospective breeders to know good chickens, whether in the form of chicks, pigeons or adult chickens. At this stage also taught how to select chickens based on the sex of chicks so they can plan whether to fatten chickens.

Demonstrations on how to choose feed ingredients according to the conditions / availability of feed ingredients from the surrounding area have been carried out. These materials are bran, the remnants of making tempe and tofu, snails, kale, natural grass, cassava and the remnants of grain scattered in the rice fields after the rice harvest. It is recommended to feed first in the morning before the chicken is released and given a full meal in the afternoon. Drinking water must be prepared always and replaced / cleaned every day.

Livestock management is done by raising chicks, hens and roosters. Taught what the appropriate sex ratio is 1:6 for chicken breeds. Similarly, the age for hens is made into eggs as seed eggs (hatches). Demonstrations for disease prevention are carried out in two ways namely the way of vaccination in chicks. Vaccination in chickens uses a vaccine from strain F or La Sota, which is dripped on the eyes, nose, beak or drinking water, or can also be sprayed. Whereas adult chickens are injected / injected into breast or thigh flesh, with a dose of 0.5 cc. ND (tetelo) outbreaks usually strike during the change of seasons, so vaccination is recommended about 1 or 2 months before the change of seasons. The period of immunity caused by vaccination is 3 months so that the next injection is done every three months.

Avian Influenza or bird flu vaccination is carried out using the inactivated Medivac AI brand subtype H5 vaccine produced by Medion Bandung. This type of vaccine is an adjuvant emulsion oil that is injected IM (intramuscularly) into a chicken breast. The dose used is 500 doses in 250 ml packages. Domestic-made bird flu vaccine that has been circulating in Kendari City is AI Vaksiflu made by Vaksindo [13].

Demonstration for making cages measuring around 3x5 m<sup>2</sup>. This will help to overcome the relatively hot temperature conditions (daily temperatures around 32 - 35°C besides that chickens will avoid wild animals such as rats, dogs and monitor lizards. The cage material is made from a combination of forest wood, bamboo slats and used beams. The roof is made of rumbiah while the walls are made of bamboo and wood slats.

The final stage of the counseling and demonstration material is to teach the community how to post harvest and market chickens. Demonstration on how to cut chicken that is good and halal, how to pluck feathers, remove innards and how to produce carcasses. The breeders are given the opportunity to choose whether to harvest / sell their chickens in the form of life or in the form of carcasses. Marketing is advised to look for customers well in advance before the chicken is harvested whether it is a restaurant, restaurant / canteen, market, supermarket located around the city of Kendari.

The results of this activity are expected to increase the laying chicken business, especially in coastal communities in the location of activities and can be emulated by other communities around it. Improved skills that are better about how to raise Native chickens will ultimately have an impact on increasing the income of the people who work on it, especially in Nambo Sub-District, Abeli District, Kendari City.

Participants' responses to the training activities, among others, were manifested by a number of questions about various matters relating to the material and business prospects of raising chicken which were trained. If observed, there are a number of factors which are supporting and inhibiting factors in this training activity:

#### **Supporting factors**

- a. The training participants' responses to the material were generally quite high. This is the main capital for the Faculty of Agriculture Team to carry out further activities.
- b. Communities in the Nambo sub-district of Abeli sub-district have Native chickens making it easier to apply Intab technology.
- c. The trainees want to raise domestic poultry in a professional manner and make it their main livelihood.

- d. The trainees asked to be given further guidance, especially concerning how to raise livestock which is profitable, especially how to prepare chickens by artificial hatching.
- e. This training activity has stimulated the creativity of the farming community, so that its empowerment can be carried out in a more targeted manner.

### **Obstacle factor**

Avian Influenza at the time of this activity carried out many attacks on domestic and domestic poultry in Kendari City. The report from the Sub-Department of Animal Husbandry of Southeast Sulawesi Province states that there are three sub-districts that have tested positive for avian influenza outbreaks in Kendari City, namely Mandonga sub-district, West Kendari sub-district and Poasia sub-district which are neighboring sub-districts of Abeli sub-district where this activity was carried out.

Tetelo (ND) which often attacks domestic poultry at the turn of the season, also in the form of a lack of knowledge of the participants on animal husbandry issues, especially regarding how to raise chickens both from the child phase (starter) to the production phase (layer). If this is not overcome with intensive counseling / mentoring activities, it will again reduce the spirit of business. Farmers in Nambo Village have not kept records of their livestock business results, because they have the habit of selling their livestock (chickens) when they go to the market and selling the proceeds directly to groceries for daily family needs. Thus it is difficult to measure objectively the real income they get from their livestock businesses because in general they also have other jobs as fishermen, construction workers, motorcycle taxi drivers, and so on.

### **4. Conclusion**

The training participants consisting of members of the farming community were quite enthusiastic about receiving the material and actively participated in the training activities on the application of the Native chicken intensification package (Intab). This situation shows that the community in Nambo Sub-District Abeli District, especially the participants, really needs guidance in potential developing of native chicken farms they have. The trainees want to make the business of domestic poultry farming as the main livelihood besides farming. This is expected to empower their potential so that their income and welfare can be increased. This can also prevent unemployment and any social impacts that might occur. Maintenance of free-range chickens with better management will increase production in the form of eggs and chicken meat which in turn can increase people's income. This can support the income of families in coastal



areas that mainly earn a living as fishermen. The income of the participants cannot yet be measured in real terms because they generally do not have financial bookkeeping records. Usually the results of selling chickens are directly spent on groceries for the family. So that the results of training activities on the application of the intensification technology package for free-range chickens (Intab) can be applied sustainably, then this activity needs to be carried out in other coastal villages in the Southeast Sulawesi region. As a follow-up to this activity, it is necessary to carry out technical guidance activities for chicks to breed through the application of a hatchery technology so that the community can more easily obtain chicks.

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