Policy in Rabbit Research and Development in Indonesia

Haryono

Indonesian Agency for Agricultural Research and Development Jl. Ragunan 29, Pasar Minggu, Jakarta 12540 Corresponding e-mail: www.litbang.pertanian.go.id

ABSTRACT

Increasing population, world economic globalization, global warming and domestic crisis including manpower quality are among challenges faced by many nations, including Indonesia, to provide food, shelter, job opportunity and welfare to the people in the country. Rabbit, among many animal species has high potential to provide a substantial amount of meat, hence contribute to more food security. Problems in raising rabbits in Indonesia, as a hot humid country includes lack of availability of quality rabbit breeds and quality feed, lack of appropriate technology for production or management and frequent diseases incident. A short of capital and small size of land use, as commonly occurs in many developing countries, cause a difficulty to produce effective and efficient production. Policy in research is prioritized to producing breeds that are adaptable to Indonesian situation, efficient feeds and feeding management fitted to local condition and also to handle disease problem. Farming management in farmers group is also a concern. A small-medium scale industry-type operation based on farmers cooperation which is integrated with organic plant production is a short term goal. A more integrated commercial type production supported by high investment and technology is a longer term objective.

Key Words: Policy, Rabbit, Development

INTRODUCTION

In 2007, world population has reached 7 billion and, and along with current birth rate, the population will reach more than 9 billion in 2050 (FAO 2012). This huge number of population will mostly live in the developing countries, where food, clean water and energy supply are less available than the developed countries. Beside the above demand, global warming which may affect the agricultural production and economic globalization, which need skillful labor, have to be well considered. Failure to meet the demand may cause poverty, famine and even chaotic situation to the country. One of the consequences of having high population is less land availability for agriculture. In Indonesia, where average land use per family is less than 0.25 ha (BPS 2012), it seems justifiable that in the future, intensification, opening more land for and agriculture selection for high productivity commodity is a priority. In the area of animal production, selection for fast growing and prolific animal, yet small in size, such as poultry and rabbit, will be an alternative.

LIVESTOCK PRODUCTION IN INDONESIA

Indonesia is a humid tropic country. It has highly fertile soil, especially those in Java, Bali, Sumatera and Sulawesi and some in Kalimantan. Hence, theoretically the agriculture production can be maximized. However, some limitations including climate changes, availability of funds and skillful labor, diseases, which to some extent, somewhat hinder these potential agricultural production. Animal production is mostly dominated by poultry, hybrids or local chickens, local ducks, which provide 1,797,500 ton of meat, and then followed by beef cattle (505,500 ton), sheep and goat (115,100 ton) and a few from buffalo (35,300 ton), and swine (234,700 ton) in certain areas (BPS 2012). Rabbit (200 ton) is a relatively new livestock fairly new to be commercially farmed. Except for the poultry hybrids and dairy cattle, which are mostly fully commercially operated, other birds (ducks, quails) and livestock are farmed in small or medium scale operation. Beef cattle and goat and sheep farming are almost entirely operated through grazing and cut and carry system. In most areas, except in Eastern Nusa Tenggara, this ruminant farming is mostly also operated in small scale.

PROBLEMS IN SMALL SCALE FARMING

Small scale farming is usually practiced by most farmers in the rural areas. Problems with small scale include: (a) subsistence; (b) depend almost entirely on the nature to provide forage feed; (c) low or hardly any capital investment; (d) farming technology is limited; (e) less ability of farmers to market their products; (f) less cooperation between farmers in the group; (g) less interest in the organization. Consequently it is difficult to develop and sensitive to quitting. Nevertheless, even micro farming is important as a source of cash income, nutrition and organic fertilizer for the farmers.

ALTERNATIVE ANIMALS

High population that demand more availability of food, less land availability for agriculture, global warming that may decrease agriculture production, long production cycle for ruminants, competitive feed for poultry and swine, a more frequent diseases outbreak are problems that has to be solved in order to secure food, or particularly, meat production in the animal sector. An alternative animal that has high productivity, requires small land to use, fed mostly feed that is not competitive to human food, easy to handle and 'halal' to certain community, is worth considering. Rabbit is one among other possible animals to choose.

RABBIT PRODUCTION STRATEGY AND ITS PROBLEM

Rabbit potential has been reported elsewhere (eg. Owen 1976; Cheeke 1986; Lukefahr 2007; etc.). At a traditional practice, a doe rabbit can produce 40 kg of meat (Raharjo 2007), and 120 kg/year at most commercial farming (Maertens 2007). At a rural operation a SSRPM model (Lukefahr 2010) fits the situation. At a more commercial rural farming, a model of an integrated rabbit-horticulture village based on farmer cooperative (Raharjo 2010) combined with fish pond is an initial step to move toward industrial farming. At industrial farming, a food processing plant and more comprehensive training and marketing system is integrated to the system. The crucial problem for this system could be management of farmer cooperation, diseases that may arise from the this extensive large scale rabbit population and promotion to rabbit meat consumption at this large scale operation.

RESEARCH PRIORITIES

In an attempt to achieve the above goal, research on: (a) producing high productivity tropically adaptive lines; (b) improvement of growth and reproduction and reduction of mortality through efficient use of feeds/forages and additives especially for small and medium scale farming, and improvement of health digestion system in the nutrition area; (c) improvements of reproductivity of does and bucks; (d) management in housing system, and management of farmer organization; and (e) diseases prevention and treatment.