

Taking Poultry Subsector to Scale: A Call for Commercial Expansion of the Indigenous Poultry Industry



Policy Brief 1

About the Policy Brief

This policy brief advocates for commercial expansion of the indigenous poultry industry as a strategy for contributing to overall growth and development of the national poultry subsector. Given the potential economic and social benefits of indigenous poultry-keeping, and its dominant and wide-spread nature particularly in rural Tanzania, the policy brief holds that commercial expansion of the indigenous poultry industry will go a long way to contribute to rural development with multiplier effects for employment, poverty reduction and livelihood improvement especially for the rural poor. However, this requires prioritisation and sound investment in the subsector by both the public and private sectors, to tap, harness and release commercial potential of the industry for both economic and social good. Of paramount importance is the need to invest in innovative interventions to address the various systems challenges which have over the decades held back the indigenous poultry industry from realising its potential. Among the challenges are demand and supply deadlocks in the indigenous poultry value chain, inadequate extension support, limited access to liquidity, and inadequate market systems for indigenous poultry products. Experience from the Research Into Use (RIU) Indigenous Poultry Commercialisation Project implemented in Pwani, Dodoma, Singida and Morogoro regions of Tanzania shows that innovation brokerage can be an effective strategy to promote innovation in rural sectors. RIU triggered up-scaling and implemented contract farming as a complementary intervention for facilitating access to credit by poor farmers as well as market development. However, such efforts would not be sustainable without a sound institutional support system for reliable extension support, regulation, monitoring and financing for the subsector. Consequently, this policy brief recommends strongly, strong public-private partnership in rolling out a three-pronged commercialisation approach that includes innovation brokerage, contract farming and institutional support systems development, as integral strategies for sustainable commercial expansion of the indigenous poultry industry.

What is the status of the poultry subsector?

Poultry farming is a widely practiced agricultural activity in Tanzania. About 66% of livestock-keeping households in Tanzania Mainland raise some poultry birds. The poultry subsector is divided into traditional and commercial production systems. The rural-based traditional system contributes 94% of the total chicken population and supplies most of the poultry meat and eggs consumed in rural areas. It also supplies about 20% of the poultry products in urban and peri-urban areas where commercial production is largely practiced.

Even though accurate statistics on poultry population are not available, Tanzania Sample Census of Agriculture of 2002/2003 indicated that there were 34,827,676 chickens on the Mainland. Out of these, 32,559,208 were local chickens kept predominantly in rural areas. Commercial birds included 589,563 broilers and 1,222,267 layer chickens kept by smallholder farmers, and 456,638 birds (both broilers and layers) on large-scale farms.

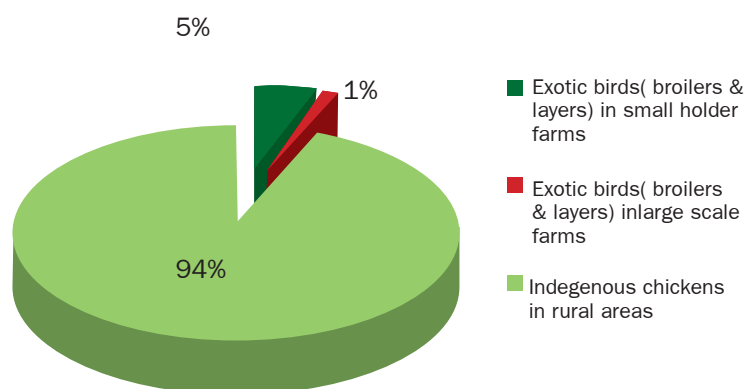


Figure 1: Proportion of chickens kept under different poultry management systems

Source: National Sample Census of Agriculture 2002/2003

The growth rate of the poultry subsector has been generally slow. In the period between 1995 and 2003, the total chicken population on the Mainland increased at a rate of 2.6% per annum. This growth was mainly associated with increased indigenous chicken population estimated to have grown at the rate of 4.3% per year between 1999 and 2003. Using the overall chicken industry growth rate of 2.6% per annum and the indigenous chicken industry growth rate of 4.3%, and given that 94% of chicken are of indigenous type; the total population of chickens in 2010 was estimated to be 38,967,752 out of which 38,204,764 were indigenous chicken.

Between 2002 and 2006, egg production increased from 790 million to 1.8 billion. The increase was associated with sensitisation on good poultry husbandry practices and use of thermo stable Newcastle Disease vaccine. The per capita consumption of eggs also increased from 23 to 50 eggs per person per year in the same period. Most eggs are consumed at the household level and little is left for sale.

In 2002, Food and Agriculture Organization of the United Nations (FAO) projected overall chicken consumption in Tanzania to be 42.7 metric tons. Rural and urban consumption volumes were 33.2 and 9.5 metric tons respectively. Consumption of poultry meat in 2030 is projected at 170.7 metric tons, of which 104.7 metric tons will be consumed in rural areas and 66 metric tons in urban areas.

How has the government approached development of the subsector?

The Government's approach to the poultry subsector development has over the past four to five decades leaned considerably towards commercial production of exotic breeds through semi-intensive and intensive production systems mainly practiced in peri-urban and urban areas. This inclination is informed largely by socio-economic benefits of large-scale commercial production of exotic chickens which have relatively higher genetic potential for fast growth and egg production than indigenous breeds. The approach is also influenced by well-documented advantages of vertical integration as a contemporary poultry management system where the entire value chain is managed under one firm thus minimising costs and risks; and easily controlling quality. However, this approach increases monopoly in the sector and therefore does not promote equity.

In 1967, Tanzania adopted socialism as a national policy for self-reliance through the famous Arusha Declaration, giving way to vertical integration of the poultry subsector through establishment of the National Poultry Company (NAPOCO), mandated to set up commercial poultry farms, breeder farms and import parent stock. The government also promoted commercial production of exotic and hybrid chicken in public schools (both primary and secondary), prisons and agriculture training institutions. This resulted in increased demand for input supplies including feeds, leading to establishment of Tanzania Feeds Company (TAFCO). The increased poultry production also meant increased need for reliable markets for chicken meat and eggs. Consequently, in 1970s the government promoted consumption of eggs and poultry meat, particularly to women, children and sick people.

The mid 1980s saw an emergence of small to medium-scale commercial producers of exotic and hybrid chickens in urban and semi-urban areas, following collapse of NAPOCO. This intensified importation of day old chicks from neighbouring countries including Malawi, Zambia, South Africa and Uganda. The government responded to the situation by encouraging private entrepreneurs in the country to establish hatcheries to cater for the increased demand of day old chicks. Only Inter-chick Company, Ruvu JKT and Kibaha Education Centre managed to establish large enough hatcheries. However, the hatcheries were unable to meet the demand for day old chicks, hence importation continued. To date, there are 19 large commercial producers of day old chicks on the Mainland, some of which also keep parent stock and raise commercial layers and broilers.

The government's efforts to promote commercial poultry production especially in the 1990s bore some fruits, as the number of layers increased sharply from 287,691 in 1995 to 1,126,697 in 2003, representing an annual growth rate of 18.6%. A much higher growth rate of layers population (26% per annum) was experienced between 1995 and 1999. Likewise, the number of broilers increased significantly from 184,002 in 1995 to 665,712 in 2003, representing an annual growth rate of 15%. A much higher growth rate of 30% per annum was experienced between 1995 and 1999.

However, the rapid growth rate of the commercial poultry subsector recorded in the 1990s experienced a major slump in early 2000 as consumers became more health conscious and began to question production methods for exotic chickens. The perception that commercial chickens were raised using drugs and hormones with potential health hazards to consumers became widespread, leading to a sudden fall in demand for exotic poultry products, even as demand for indigenous chickens and eggs surged. Market studies revealed that consumers had more trust in the way local chickens were raised, felt that the chickens had a better taste than exotic breeds, and were willing to pay more for the local chickens and eggs.

Consequently, the high layers' annual population growth rate of 26% experienced between 1995 and 1999 declined to 11.7% over the period 1999 to 2003, while that of broilers dropped sharply from 30% to 2% over the period 1999 to 2003. To date, indigenous chickens remain the most consumed poultry type in rural areas. In addition, the relatively more health conscious and affluent middle and upper classes in urban areas continue to be a niche market for the indigenous chicken products.

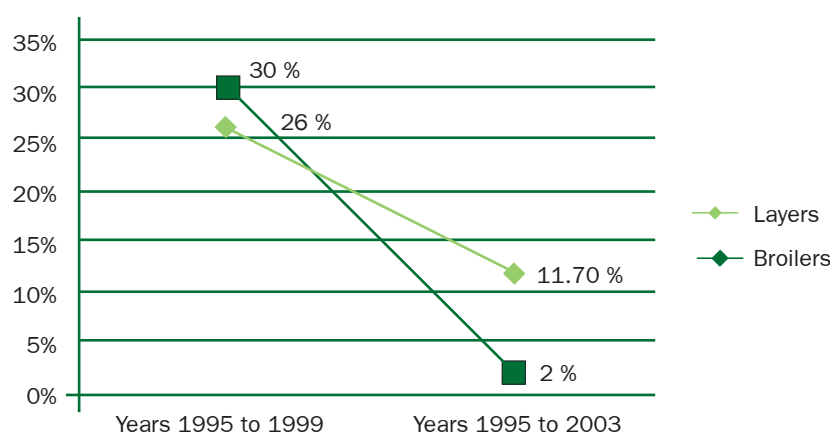


Figure 2: Annual population growth rate of exotic chicken breeds (1995 to 2003)

Following the drastic change in the poultry market equation, some large-scale poultry producers responded by including indigenous chicken in their flocks. Out of a total of 456,638 chickens kept by large-scale farms in Tanzania mainland as of 1st October 2003, indigenous chickens were 22,423 while 241,592 were broilers and 312,043 were layers. On the other hand, the government's response focused more on improving genetic potential of indigenous chickens through crossbreeding with improved cocks, than developing a comprehensive national strategy for commercial expansion of the indigenous poultry industry. The response was associated with a strongly held view among policy makers and scientists about the low genetic potential and productivity of indigenous chicken, even as studies continued to demonstrate that productivity of indigenous chickens can be significantly increased by improving nutrition, disease control, production methods for day old chicks, and housing among other recommended poultry management practices (*Minga et al., 1996; Msami, 2000; Mwalusanya, 2002*)¹.

The initiative to improve genetic potential of local chickens through crossbreeding with improved cocks has been widely promoted through Local Government Authorities (LGAs) under the Agriculture Sector Development Program (ASDP) with funds from Tanzania Social Action Fund (TASAF) and councils own sources through District Agriculture Development Plans (DADPs). However, its prospects for commercial success were significantly diminished by the long term system challenges which have over the decades, impeded growth and development of the indigenous poultry industry.

Overall, even though the government's active participation has had some positive impact on growth and development of the poultry subsector, its failure to integrate the indigenous poultry industry in the mainstream of commercial expansion is a major missed opportunity to tap and harness the tremendous potential of the industry to contribute to poverty reduction and livelihood improvement especially in rural areas.

Why should the indigenous poultry industry be prioritised?

Nearly 8 out every 10 Tanzanians live in rural areas and mainly depend on agriculture as their source of livelihood. Livestock production is part and parcel of the rural economy and constitutes one of the

¹ Apart from genetic effect, low egg production among indigenous chicken could be improved and even doubled without any detrimental effect on hatchability through rational feeding. Improvement of egg production could also be achieved by early weaning of chicks, even though its effect on chicks survival and female reproductive life needs to be known (*Minga, 1996*). Other studies have observed that hens form majority of indigenous poultry flock followed by chicks and growers in more or less the same number. Cocks are the fewest, comprising only 8.2% of the flock mainly because they are culled at an early age for either sale or slaughter. The ratio of chicks: growers: adults were 10:10:14 (*Msami 2000*). However, if husbandry was improved and veterinary interventions applied, it would be possible to change that chick: grower: adult ratio such that the ratio based on one hen would be 34:32:1 (*Minga, 2001*). The low number of growers and chicks is mainly due to high chick mortality resulting from diseases, predation and nutritional disorders.

major agricultural activities. About 7 out of every 10 households with livestock keep some poultry birds. Nationally, agriculture accounts for 25.8% of GDP, 34% of exports and 74% of employment besides providing raw materials to industries and market for the industrial products.

Since the late 1990s, Tanzania's economy has recorded a rapid growth rate. Between 1998 and 2007, the gross domestic product (GDP) growth rate averaged 6.6% per year. The growth was broad-based with large-scale agriculture and manufacturing sector contributing most to the growth. The fastest growth rates were realised in export oriented crops such as cotton, sugarcane and tobacco which recorded growth rates of almost 10% annually. However, these crops are mainly concentrated in specific regions of the country. Fisheries and livestock sectors account for about a third of agricultural GDP. Fisheries grew steadily at a rate of 5.1% per year in the period 1998-2007 but the livestock sector lagged behind crop agriculture, growing at an average rate of 3.3% per year. The slower growth rate in the livestock sector has implications for reducing poverty among poor households who depend on cattle and poultry as a source of livelihood.

Evidence shows that the impressive growth in the agriculture sector has not achieved significant reductions in household income poverty or improvement on the nutritional outcomes especially among the rural poor. The 2007 National Household and Budget Survey (NHBS) showed that national poverty headcount fell by only 2.1 % points from 35.7 % in 2000/01 to 33.6% in 2007, while rates of rural poverty decreased by 1% only. Food poverty is highest in rural areas, at 18.4% compared to the national average of 16.6%. Similarly, levels of malnutrition in the country remained high. The share of people with insufficient calorie consumption fell marginally from 25% in 2000/01 to 23.5% in 2007. Child stunting remained unchanged, at 40% among under-fives. Tanzania Demographic and Health Survey (TDHS 2009-10) further showed that children living in rural areas were more likely to be stunted (45%) than those in urban areas (32%). A similar pattern was noted for severe stunting, 18% for rural and 12% for urban areas. Moreover 5% of children are wasted while 16% are underweight. Rural children are also more likely to be underweight (17%) than urban children (11%). The prevalence of wasting has remained the same in Tanzania for the past 10 years.

On the other hand the 2007 NHBS, showed that although about 630,000 new jobs were created annually particularly in the informal sector, unemployment remains an issue particularly among the youth. Generally, unemployment rate was higher for females, about 15.4% compared to 14.3% for male youth. Moreover, women constituted only 24.7% of paid employees. The proportion of female-headed household increased from 23% in 2000/01 to 25% in 2007, while the percentage of population living in female-headed households below the basic needs poverty reduced marginally from 35% to 33% in the same period. About 80% of women contribute to rural workforce, while 60% contribute to food production (*Ministry of Community Development, Women and Children*).

The high rate of poverty in rural areas can be explained by the main source of livelihood. Given the large proportion of the rural poor who depend on agriculture as their main source of livelihood, targeting poverty reduction through agriculture is crucial. However, evidence has shown that high levels of overall growth in the agriculture sector do not necessarily lead to reduction in the level of poverty and improved food security and nutrition for the farming households. The rapid growth experienced in the period 2000-07 was attributed to increased production of a few crops (rice, wheat, barley, tobacco, cotton, fruits and sugar cane). Moreover most of the well-performing crops are concentrated in the northern and eastern regions of the country and are often produced by a few large-scale farmers. This explains why the observed growth did not have huge countrywide

impacts in reducing poverty or improving nutritional outcomes. A recent trend and outlook analysis by the East and Central Africa Regional Strategic Analysis Knowledge Support System (May 2011) recommends that in order to maximize the impact of growth on poverty reduction and food security, agricultural growth has to be broader and must include sectors where the poor participate. The growth must also have a wide regional outreach and spatially targeted in order to reach as many poor people as possible.

Keeping indigenous chicken is one of the widely practised economic activities in Tanzania and plays an important role in improving household income and nutrition especially in rural areas. Out of the 66% of livestock keeping households with some poultry birds, 99% keep indigenous chickens. The local chickens are mostly owned and managed by women and children, and are often essential elements of female-headed households (*Msami, 2005*). The chickens are of a wide variety and well adapted to the local environment and resistant to many common diseases. It is widely documented that indigenous poultry-keeping can break the vicious cycle of poverty, malnutrition and disease. Chicken meat is rich nutritionally, providing protein, fats, minerals and vitamins. Thus, indigenous chicken can be a good source of cheap nutrition for the poor households, the sick, malnourished and children under the age of five (*Kitalyi, 2002*). The chickens have a tremendous potential as a source of wealth and development and can promote gender equity, alleviate poverty and improve livelihood.

Despite contributing 94% of the total chicken population in Tanzania and supplying nearly all poultry meat and eggs consumed in rural areas and about 20% in urban areas, the potential of the indigenous poultry industry remains largely untapped. Production scales are extremely low with only 3% of the indigenous poultry keeping households raising more than 40 birds each. The majority of the households produce between 5-10 chickens only, some over a period of 12-18 months. However, demand for local chickens remains high mainly due to the preferred taste of the chickens and the generally trusted methods of raising the birds.

A market study contracted by the Research Into Use (RIU) in May 2010 showed that the price of a mature local chicken in major urban centres such as Dar es Salaam, Mwanza and Arusha ranges between Tsh.9,000 and Tsh.12,000, while that of the exotic chicken ranges between Tsh.5,000 and Tsh.6,000, making the local chickens a preserve for the affluent urban upper and middle classes. A bigger share of the urban market remains untapped due to undersupply of the local chickens and the high price which has locked out low-income earners in urban areas from enjoying the highly nutritious delicacy. Under production of indigenous chickens is a missed opportunity to maximise on the existing market opportunities to increase incomes, reduce poverty and improve livelihood for the rural poor especially women and children. It is also a missed opportunity to contribute to overall growth and development of the national poultry subsector.

What are the major constraints to commercial expansion of the indigenous poultry industry?

Among the major constraints to commercial expansion of the indigenous poultry industry are demand and supply deadlocks in the value chain, inadequate extension support, limited access to liquidity, poor quality and high prices of inputs such as feeds and vaccines, and inadequate market systems.

Demand and supply deadlock in the local poultry value chain: For several decades, rural poultry farmers have been unable to produce significant volumes due to lack of relevant skills for modern poultry management and limited access to essential inputs especially day old chicks and quality feeds. On the other hand, agribusiness suppliers, private veterinarians and marketing agents have not been keen to extend their businesses to rural areas mainly because of low demand for input supplies and services, as poultry production is largely subsistence-based, chickens are free-ranged, chicks are naturally bred, and birds hardly vaccinated nor treated when sick. This has resulted in a major demand and supply deadlock likened to the “chicken and egg” dilemma i.e. farmers require sufficient poultry inputs to be able to increase production scales, while agribusiness suppliers require an assurance that there is enough demand for inputs before they can move to corresponding scales of production. Failure by development programmes in the industry to unlock the volumes deadlock has been a major barrier to commercial expansion of the indigenous poultry industry.

Inadequate extension support: Extension support is a critical intervention for promoting access to, and use of new knowledge in rural poultry production. However, delivery of the services in rural areas is significantly constrained by a combination of factors including shortage of qualified extension workers, inadequate infrastructure and facilities, weak research-training-extension-farmer linkages, and inadequate collaboration among stakeholders. Experiences from the RIU Indigenous Poultry Commercialisation Project implemented in Pwani, Dodoma, Singida and Morogoro regions, showed that even after the project made deliberate efforts to link rural poultry producers with government extension services in their localities, accessibility of the services remained difficult in some areas, forcing some of the farmers to seek advisory services from private veterinarians to safeguard their investment in larger poultry flocks. In some areas, extension personnel also dabble as village executive officers, making their availability to farmers even more difficult.

Limited access to liquidity: Access to liquidity is particularly an acute problem in the agriculture sector, poultry farming included. The higher transaction costs to financial institutions associated with dispersed populations and inadequate infrastructure, coupled with the particular needs and higher risk factors inherent in agriculture; result in the under-provision of financial services in rural areas. Furthermore, where services are available, products are often designed without consideration for the needs and capacities of rural households and agricultural producers. The inability of households and enterprises to access capital on competitive terms to undertake profitable investments, or take advantage of market opportunities, means that incomes and growth are lower than they need be. Without market instruments to insure against risk, rural households and enterprises may even retreat from profitable projects for which they have adequate liquidity. The absence of competitive savings instruments and other financial services in rural areas leads to less productive forms of savings that cut further into households’ scarce liquidity and dampen local growth prospects.

Inadequate market systems: Lack of reliable market information to rural poultry producers and difficult urban markets access due to poor infrastructure, are major constraints to growth and development of the indigenous poultry industry. Accessibility of up-to-date information on the prevailing market scenario including consumer prices for poultry products is particularly important in ensuring that rural poultry farmers make informed pricing decisions. Thus, the apparent lack of a centralised market information system easily accessible by rural poultry producers means that their pricing decisions may not necessarily be reflective of the market situation and could negatively affect their incomes from the poultry business.

Likewise, difficult urban markets access characterised by high transportation costs due to poor infrastructure increases production costs and diminishes returns from the poultry business. It also affects marketing of poultry products as rural producers are forced to go through a chain of middlemen to gain access to the tertiary market. Considering that the middlemen have to add some price mark-up for commercial gain, the end market price for local chickens in the tertiary market becomes significantly high. The RIU market study (May 2010) revealed that most rural poultry farmers sell their chickens to the village trader (trader 1) at Tsh.3,200 for every mature bird. Trader 1 in turn sells the chicken to a retailer in the secondary market (trader 2) at Tsh.4,500 - Tsh.6,000. Trader 2 sells the chicken to the tertiary market at Tsh.6,000 - Tsh.7,500. The consumer price for the chicken in the tertiary market is Tsh.9,000 when alive and Tsh.9,300 when dressed. Thus, the rural poultry farmer earns only 36% of the end-market price for the chicken in the tertiary market where consumers are willing to pay much more.

What are the options for going to scale?

In view of the various system challenges to commercial expansion of the indigenous poultry industry, options for going to scale should include strategies for unlocking the established demand and supply bottlenecks in the local chicken value chain, improving extension support, increasing access to liquidity, promoting market development, and sustaining scales. Experience from RIU's Indigenous poultry Commercialisation Project has shown that innovation brokerage can be an effective strategy for triggering scales, while contract farming comes in handy as a complementary intervention for facilitating access to credit by rural farmers as well developing the market. However, these efforts would not be sustainable without sound institutional support systems for extension support, regulation, monitoring and financing for the subsector.

(i) Innovation brokerage as a strategy for triggering scales

Innovation brokerage is a dynamic institutional arrangement that comprises three primary functions namely demand articulation, network composition and innovation process management. Demand articulation involves articulating innovation needs and visions and corresponding demands in terms of technology, knowledge, funding and policy, achieved through problem diagnosis and foresight exercises. Network composition involves facilitating linkages between relevant actors and matchmaking of possible cooperation. On the other hand, innovation process management focuses on enhancing alignments in the often heterogeneous networks constituted by actors from different institutional backgrounds and reference frames related to norms, values, incentives and reward systems. Furthermore, it includes a host of facilitation tasks to ensure that the networks are sustained and become productive, e.g., through building trust, establishing working procedures, fostering learning, and managing conflict as well as intellectual property rights.

As an innovation broker, the RIU project focused on championing the indigenous poultry industry commercialisation vision; addressing innovation needs including unlocking the demand and supply deadlock in the local poultry value chain, strengthening capacity of key stakeholders and increasing access to flexible financing; and facilitating multi-stakeholder interactions through the value chain approach. Contrary to the common practice where development programmes tend to push new knowledge to farmers in

the hope of triggering scales, the RIU project pushed poultry farmers to new scales, effectively stimulating demand for, and use of new knowledge.

The farmers were mobilised through champions who had been empowered to believe in the commercialisation dream, and asked to raise 100 chickens each, with a plan to move to 200 and later 300 birds. Over 3,500 farmers signed up in the project. As opposed to the farmer field-school approach common with most government extension systems, the project dispatched household poultry advisors to provide on-site practical training to the newly recruited farmers until they were confident enough to take care of larger poultry flocks. Regarding investment capital, the project provided the farmers with interest-free in-kind credit in form of 100 day old chicks payable upon selling mature chickens, as well as subsidies (feeds, vaccines and medicines) enough for one month, to kick-start the commercial transformation process. During their second round of production, farmers credit needs were supported through a contract farming model that ensured access to necessary inputs for the entire production cycle.

As a result of these efforts, local poultry production increased from 5-10 chickens per farmer to 100-300 chickens each. The number of production cycles also increased from only 1 in 12-18 months to 3 in 12 months. The new scales immediately triggered demand for input supplies and extension services, with farmers who could not readily access government extension services opting to hire advisory services from private veterinarians, to safeguard their investment in larger poultry flocks.

On the input supply side, the project mapped various agribusiness suppliers to understand their capacity needs and empower them to cope with the increasing demand for inputs. For example, prior to introduction of the project, only 2 medium-scale hatcheries were producing indigenous day old chicks, however as the project progressed, 11 other medium-scale hatcheries registered to start production or increase their existing production. The RIU project assisted all the 13 hatcheries to access improved technologies and advisory services to enable them increase production and cope with the increased demand for indigenous day-old chicks. Five of the hatcheries were provided with a total of Tsh.300 million as matching grants to procure bigger incubators, expand parent stock size and finance some construction work. These efforts resulted in a major increase in production of the indigenous day old chicks from about 500-2,000 chicks per week to 6,500-10,000 chicks per week.

To facilitate linkages between the rural poultry producers and input suppliers, a voucher system was used in the first round of production to enable the farmers to access subsidies (feeds, vaccines and medicines) from the nearest agribusiness suppliers. The voucher system helped the stakeholders to know each other and establish business relationships. It also had a positive influence on business practices of the agribusiness suppliers in terms of recording keeping since availability of proper sales records was essential for redeeming of the vouchers. Institutional linkages were also established with relevant government departments to promote regulation of the industry and enhance access to extension services. Regarding markets, the programme directly linked rural producers to wholesale buyers that bought 75% of mature chickens from the farmers and sold them to poultry markets in Dar es Salaam. The remaining 25% was left for

domestic consumption for health and nutrition benefits as well as to allow farmers to explore other rural markets.

(ii) Contract farming as a strategy for market development and increasing access to credit

Contract farming is widely recognised as a pro-poor institutional arrangement for facilitating and accelerating agricultural commercialisation. It entails a contractor providing farmers with input supplies, technical advice, in-kind credit, and market services; while the farmer commits to produce a specified quantity and quality of an agricultural product which is sold exclusively to the contractor, usually at a pre-determined price. The RIU project demonstrated that contract farming increases access to credit for farmers and drives production scales; opens up markets and increases income; provides farmers with price insurance against fluctuations; enhances extension services and use of new knowledge; improves business management skills of farmers; and stimulates rural development through multiplier effects for employment creation, infrastructure and market development.

Rural poultry producers who had been made to believe in the commercialisation vision and empowered to produce at least 100 chickens each were linked to KukuDeal, a business initiative established by RIU-Tanzania to run the contract farming model and deal with overall system challenges along the local poultry value chain. Through KukuDeal, poultry producers were provided with interest-free investment capital in form of 200 day old chicks, vaccines, drugs, feeds, extension support, entrepreneurship skills training, and a ready wholesale market for mature chickens. By limiting the role of middlemen through bulk purchase of chickens from farmers, KukuDeal has been able to the lower consumer price for local chickens from Tsh.9,000 to Tsh.6,000, and increased the farmer price from Tsh.3,200 to Tsh.5,000; allowing more urban consumers to enjoy the delicacy, while rural producers to earn much more from their production efforts. The KukuDeal pricing scheme represents a much higher end-market price gain (83%) for the rural poultry farmer, compared to 36% if the farmer was to access the tertiary market through a chain of middlemen.

(iii) Institutional support systems development as a strategy for sustainability

As the indigenous poultry industry moves to large-scale commercial production, it will require sound institutional support systems including highly efficient extension services easily accessible by all rural poultry producers; stronger regulatory capacity at the central and council levels to ensure the quality of poultry inputs and products entering the market; adequate capacity for disease control including epidemic preparedness; increased investment in new technologies and promotion of new knowledge use to drive scales; easy access to liquidity to stimulate private sector investment; and supportive market systems to enable rural poultry producers to sell their chickens more profitably and increase income from the poultry enterprise.

Currently, the institutional support system is inadequately prepared for large-scale commercial expansion by the rural poultry producers. Livestock extension services are severely constrained by a combination of factors including shortage of qualified extension personnel, inadequate infrastructure and facilities, weak research-training-extension-farmer linkages, and inadequate collaboration among stakeholders. Moreover, a clear mechanism for monitoring and regulating the indigenous poultry industry has been largely missing, partly due to the backyard nature of the industry characterised by subsistence production, low productivity of chickens, lack of a functional value chain, and limited public and private sectors' interest and investments in the industry.

However, following the successes of the RIU project, the government has started monitoring production efforts in the industry especially activities of the newly established indigenous day old chicks' hatcheries and breeder-farms to control production quality, enhance disease surveillance and promote animal traceability and welfare. Similar efforts are needed to ensure that other poultry inputs including feeds, vaccines and medicine; as well as products (mature chickens and eggs) entering the market are of acceptable quality and fit for consumption.

Recommendations

Based on the RIU experience, this policy brief recommends highly, strong public-private partnerships in rolling out a three-pronged approach that includes innovation brokerage, contract farming and development of institutional support systems, as a feasible option for sustainable commercial expansion of the indigenous poultry industry which includes the rural poor for a more equitable growth. The approach should primarily focus on pushing up production scales and enhancing innovation demand and capacities through innovation brokerage; and pushing on with market development and easing access to credit by poor farmers through contract farming, and keeping up (sustaining) scales through sound institutional systems support. Figure 3 below illustrates RIU's approach premised on ideals of horizontal expansion of the indigenous poultry industry especially widespread economic and social gains for the rural poor.

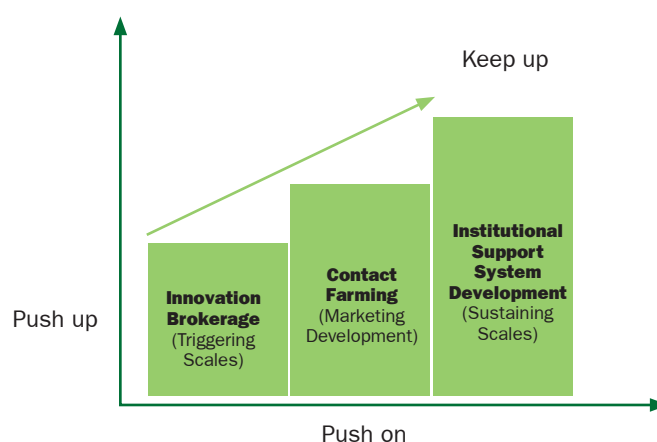


Figure 3: Key Steps to sustainable commercial expansion: RIU approach

For further reading

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