



## Case Stories on Institutional Change

*Personal Experiences of RIU-Tanzania Program Partners Telling How they Engaged to Transform the Backyard Indigenous Chicken Industry in Tanzania into a Commercial Sector that Creates Jobs and Increases Incomes.*

The Case Stories were written by RIU-Tanzania program partners in a write-shop held in Dar es Salaam and facilitated by Royal Tropical Institute (KIT) in April, 2011



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## ABBREVIATIONS AND ACRONYMS

|        |   |  |
|--------|---|--|
| CSO's  | - | Civil Society Organisations                                    |
| CRT    | - | Central Research Team  |
| DFID   | - | Department for International Development                       |
| FBO's  | - | Faith Based Organisations                                      |
| GDP    | - | Gross Domestic Product   |
| JKT    | - | Jeshi la Kujenga Taifa (National Service)                      |
| KIT    | - | Royal Tropical Institute (Koninklijk Instituut voor de Tropen) |
| LGAs   | - | Local Government Authorities                                   |
| NAPOCO | - | National Poultry Company                                       |
| NGOs   | - | Non Governmental Organisations                                 |
| PPP    | - | Public Private Partnership                                     |
| RIU    | - | Research Into Use  |
| TAFCO  | - | Tanzania Feed Company  |
| TPBA   | - | Tanzania Poultry Breeders Association                          |
| TSH    | - | Tanzanian Shilling   |
| TV     | - | Television   |
| UK     | - | United Kingdom   |
| USD    | - | United States Dollar   |

## SECTION 1: INTRODUCTION



## 1.1 INTRODUCTION

Research Into Use (RIU) country programmes stimulated institutional changes that took place in a number of domains including: research practice; policy process; markets and marketing systems; policy relevance and responsiveness to poor people; access to technology; access to input and output markets; financing; new patterns of partnerships; and new and existing organisations that are playing new roles.

Between 2009 and 2011, remarkable changes took place in the indigenous chicken industry in Tanzania as a result of RIU's work. Local farmers increased their chicken stocks from 10 or 20 to more than 200, turning indigenous chicken production into a business. Farmers who were previously producing for own consumption only, now sell their chicken and make a profit. They source one-day chicks at specialised hatcheries, which did not formerly exist before. They established contracts with buyers which guarantee a market for their chickens. And they are now able to access necessary support, such as extension and veterinarian services.

Within one year of RIUs involvement in agro-mechanisation, notable changes were evident as small farmers cooperated in bundling their lands and collectively bargained for affordable mechanisation services from tractor owners. As a result, smallholder farmers were able to access mechanisation services, they saved time and labour, increased the size of cultivated land, grew improved varieties, applied new technologies, and managed to increase their maize and rice production.

The above institutional changes represent a key impact of RIU in terms of strengthening innovation capacity. These changes are also important indicators that country programmes can use as evidence to support the case that RIU-type programmes can be effective mechanisms for strengthening innovation capacity. However, the details of such evidence have to be captured in formats that are appropriate for both national and international policy funding audiences.

To enable a broader and clear understanding of how these changes happened and the driving forces behind them, the Central Research Team (CRT) requested the assistance of the Royal Tropical Institute (KIT) in capturing the institutional change evidence and in establishing a mechanism to help both country programmes and CRT to generate information on institutional change. KIT conducted a brief analysis of the country reports of the evaluation teams helped to gain understanding of the types of institutional change that are being flagged as important. However, capturing the innovative driver required further effort and therefore a *write-shop* process was agreed upon. The *write-shop* was a three-day process where stakeholders reflected on their experiences and developed case stories detailing the innovations they have been involved in, the institutional factors that made the innovations happen and key lessons and practices that have fostered these changes to transpire. This report provides the outcomes of a write-shop.

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## THE WRITE-SHOP APPROACH

The aim of the write-shop was to document experiences of stakeholders in the Research Into Use Country Programme in Tanzania. A write shop is an intense participative way of writing publications in such a way that they are easy to understand and used by practitioners. The write-shop is extremely flexible, the repeated presentations, comments and revision of drafts allowed for case studies to be reviewed and revised thoroughly. A team of facilitators and editors guided and assisted the participants in the writing process.

The write-shop was conducted from the 11<sup>th</sup> to 14<sup>th</sup> of April 2011 in Dar es Salaam. Participants included a wide range of stakeholders involved in agricultural innovation and institutional change process in the RIU programme in Tanzania: farmers, private sector, government institutions and the RIU Country programme team, all of them having interesting, evidence-based, concrete and practical experiences that are worthwhile documenting. They are the authors of the case stories, writing about their experiences from their particular perspectives. The RIU Tanzania Country Programme identified the participants. Authors worked individually or in pairs on their case stories. This resulted in 12 case-stories with unique topics.

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## WRITE SHOP PROGRAM

The write shop program was flexible. The RIU country team and KIT-staff continuously discussed and adapted the program to the specific needs of participants and their specific stories and based on the progress of the writing-process.

| Day                         | Activity   |
|-----------------------------|--|
| Monday                      | <b>4pm: arrival of participants</b>  |
| 11 <sup>th</sup> April 2011 | <b>Plenary:</b> introduction, objectives of the program, planning, preparation for case study presentations the next morning |
| Tuesday                     | <b>Plenary:</b> Presentation of topics and key messages by participants  |
| 12 <sup>th</sup> April 2011 | Advices, suggestions and tips from other participants  |
|                             | <b>Individual:</b> Developing a detailed outline for the case  |
|                             | Writing first draft of the case story  |
| Wednesday                   | <b>Individual:</b> Writing first draft of the case story   |
| 13 <sup>th</sup> April 2011 | <b>Group work:</b> Peer reviewing: feedback from participants and facilitators   |
|                             | <b>Individual:</b> Writing 2 <sup>nd</sup> draft of case studies   |
|                             | <b>Overnight editing:</b> English and content editing  |
| Thursday                    | <b>Individual:</b> feedback from facilitators and editors  |
| 14 <sup>th</sup> April 2011 | <b>Individual writing:</b> Writing final draft   |
|                             | <b>Plenary:</b> Identifying the critical success factors for innovation and lessons learnt                                   |
|                             | <b>Evaluation and closing</b>  |

## OUTCOMES

The write-shop resulted in this report that includes a series of 12 case stories, developed by 14 participants. The report gives an overview of experiences and lessons learnt. Participants' own case stories are a unique way to present experiences to other stakeholders, partners, or donors. The case stories are describing the innovation process from the different angles. Each author played a specific role in the innovation process. They have described the innovations from their perspective, identifying the factors that made the change happen. In plenary discussions it became clear that all the innovations, at different levels, involving different actors, and taking place simultaneously or at different times, were crucial to make the system work and to make the change happen.

The first story, written by John Theodosias Kaijage, provides a historical overview of the policy context of poultry production in Tanzania. It also identifies the contributions that the RIU programme made to increase awareness of policy makers on the importance of the indigenous chicken industry as an economic sector. The second and third case stories (by Vera F. Mugittu, Jwani Tranquilino Jube and Matilda Mndeme) elaborate on the how the Research Into Use Country Programme facilitated the development of new institutional arrangements and improved partnerships among stakeholders, which proved to be central to innovations in the production systems and the development of the sector as a whole. This is followed by a description by Eliasa Saidi on the way RIU made experiential, needs-based learning as a key strategy and approach to innovation.

In his story Godfrey Anigulile Mwaipopo, a farmer from Kibaha District, is convincingly arguing that improving production of indigenous chicken is a viable business opportunity for smallholder farmers that can contribute to poverty alleviation in rural areas in Tanzania. Maimuna Sefu Mkongea, a farmer leader or champion from Rufiji district, is describing the importance of mobilizing farmers in the innovation process.

The following stories focus on the importance of demand driven service delivery and bringing together service supply and demand. Leah Kimiro, a poultry household advisor, is explaining how she contributed to improving knowledge and skills of local farmers. Agustino C. Kibaya explains how improved collaboration between the public and private sectors contributed to the development of the indigenous chicken value chain. Festo Balegele, a hatchery owner, is explaining the arrangements that allowed him to increase his hatching capacity and to turn hatching indigenous chicken into a viable business with secured market relations. The importance of good collaboration between chicken producers and veterinarians services is reflected in the case story of Charles E. Mgaya. He explains how the company he works for, Bytrade, improved the drug supply to rural areas. Dennis Mbangulla looks at how the changes initiated by RIU could be sustained through the setup of “KukuDeal” that can take up the brokering and funding role that RIU developed. In his recommendations, Dennis suggests that the next step would be for KukuDeal to run as a commercial entity and develop a business plan, if possible together with other private sector stakeholders like Bytrade and the hatcheries, that can be presented to the government, donors, development banks, development partners, investors.

Finally, Felix Temu and Thabit Waziri are telling the story on how improved organisation of farmers at one side, and of tractor owners at the other side, contributed to improved agricultural mechanisation in Morogoro region.

In the concluding chapter we discuss institutional change domains that have allowed RIU’s innovations in the poultry subsector and agro-mechanisation. These include New forms of financing rural innovation: Relevance for poverty reduction; Market-related institutional change; New types of organizations doing new types of roles; Old types of organizations doing new types of roles; New research practices; New network configuration; and Policy change.





## SECTION 2: COMMERCIALISATION

## 2.1 NEW DYNAMICS IN POLICY MAKING ARE PAVING THE WAY TOWARDS COMMERCIALIZATION OF INDIGENOUS CHICKENS IN TANZANIA

John Theodosius Kaijage,

Principal Livestock Research Officer, Ministry of Livestock Development and Fisheries

*In light of emerging innovative approaches in the poultry subsector, which have increased flock sizes and sales volumes and has attracted more actors, the Government of Tanzania has developed new regulations, specific for poultry, to ensure the smooth transformation of the sub-sector from a back yard industry to commercial scale.*

### INDIGENOUS CHICKEN HAS HISTORICALLY BEEN A BACKYARD INDUSTRY

Before independence in 1961, the colonial Government of Tanganyika had no poultry development policy. The poultry sector was entirely predominated by indigenous chickens kept in the rural settings for the purpose of meeting social obligations, such as rituals, meeting dowry and offering gifts in terms of eggs and live chickens to colonial masters. The scenario remained the same until 1967 when the Government began to regulate the poultry sector.

In 1967, Tanzania, through the Arusha Declaration, adopted a broad policy of socialism and self reliance. The National Poultry Company (NAPOCO) was established and mandated to establish commercial poultry farms, breeder farms and importation of parent stock. The Government thereafter promoted the establishment of commercial poultry enterprises using exotic hybrids in the Government primary schools, secondary schools, prisons and agriculture training institutions. Shortly after, the Tanzania Feed Company (TAFCO) was established to supply feeds for poultry. In the 1970s, the Government promoted the consumption of eggs and poultry meat, particularly to women, children and sick people. However, during that period the Government had no policy for development of indigenous chickens despite their being predominant in the country. This was associated with the perception of the policy makers and scientists that indigenous chicken have low genetic potential for egg production and growth rate.

In the mid 1980s the collapse of NAPOCO, combined with economic hardships, allowed for the emergence of small scale farmers producing hybrid chickens commercially, particularly in urban and peri-urban areas. This raised an intense importation of day old chicks from neighbouring countries such as Malawi, Zambia, South Africa and Uganda. The change in the poultry sector prompted the Government to promote private entrepreneurs to establish hatcheries in the country to cater for the demand of chicks. Only Inter-chick Company, Ruvu JKT and Kibaha Education Centre responded to establish the hatcheries. However, the hatcheries established were unable to meet the demand for day old chicks and importation continued.

In the 1990s the demand for eggs and poultry meat from indigenous chickens, rather than hybrid exotic chickens, increased significantly and customers were ready to offer more money. This was associated with the perception that exotic chickens were raised using drugs and hormones which have potential health hazards to consumers. In addition, most local Tanzanians preferred the taste of indigenous chicken to exotic ones. This phenomenon concerned researchers, development projects and the Government who realized the need to develop initiatives to support indigenous chicken development to cater for the increased market demand.

Researchers, Government agencies and various development projects tried to improve development of indigenous chickens in the country but they could not find a successful way to commercialize their production. For example, in 1990's the Government initiated a large project in the country aiming to improve the genetic potential of indigenous chicken through cross breeding with exotic cockerels but the project failed due to lack of backstopping. Most of projects for indigenous chickens did not create enough impact because they had single ended interventions and were not able to attract the attention of policy makers who could influence the Government to include indigenous chicken in the development agenda. Furthermore, the Government had invested extensively in research and development of hybrid chickens but recommended husbandry practices and disease control innovations which were unfortunately not made easily available to indigenous chicken farmers.

The status of the indigenous chicken industry began to change when Research Into Use (RIU) initiated its poultry project in Tanzania in 2008. The project aimed to develop and commercialise the indigenous chicken industry by increasing the use of new knowledge and technologies among producers; increasing investment in inputs, outputs and service provision systems; and increasing production scales of smallholder rural farmers.

RIU used a bottleneck approach to solve challenges in the entire system as they occurred. Using the approach the programme identified key actors and existing problems in the entire value chain, and then worked to coordinate and implement solutions together with stakeholders to address identified challenges. As a result of these interventions, the indigenous chicken industry is now more specialized with a value chain of producers focusing on hatching eggs, hatchery coordination, delivery of chicks, chicken production, service provision and selling of indigenous chickens.

RIU provided soft loans and facilitated the process of purchasing and importing large incubators for hatchery operators. The Government supported the process waving the importation taxes for hatchery equipment. Soft loans provided to hatcheries were also used to invest in building infrastructures such as poultry houses for rearing breeder hens or buying chicks. On a similar basis, rural poultry farmers were provided initially with 100 chicks as a soft loan on the first round and were later integrated in a contract farming scheme where each farmer kept about 200 chicks. All farmers were linked with poultry household advisors to train them on poultry husbandry. Through the contract farming system RIU also linked farmers with wholesale markets to sell their chickens upon maturity. For the purpose of sustaining the project beyond RIU's existence, a business initiative named KukuDeal was initiated in 2010 to continue with overall coordination of the activities along the value chain.

The emergence of indigenous chicken hatcheries and breeder farms has increased the number of actors in the poultry sub-sector. This has shifted the Government's attitude from indifference to seeing the need to monitor and regulate the poultry sub-sector including indigenous chickens.

The Government now enforces Regulations for operation of hatcheries and breeder flocks to minimize the spread of poultry diseases and to ensure smooth transition of the poultry sub-sector. In addition, the commercialization of indigenous chickens, initiated by RIU, has shown the necessary evidence for the Government to develop and enforce regulations for manufacturing of poultry feeds, traceability and animal welfare.

Furthermore, the increase of actors in the poultry sub-sector and its vigorous commercialization persuaded the Government to motivate and engage stakeholders to form poultry societies that are organized enough to work with the Government to resolve the challenges of the poultry sub-sector. Hatcheries and breeders have already come together formed and registered the Tanzania Poultry Breeders Association (TPBA). There are also plans to form the Tanzania Poultry Association. The innovation by RIU has stimulated the Government's interest to consider the development of a National Strategic Plan specifically for development indigenous chickens which will replicate the approach the model employed by RIU in other areas in the country.

## THE FUTURE OF GOVERNMENT INVOLVEMENT

Now that the indigenous poultry sector development has been stimulated, it is important for the Government in collaboration with other stakeholders to assist its continued growth by assisting processes that will enable farmers to acquire loans, acquire land, market poultry products, and develop slaughter and marketing facilities. On the other hand, the Government should build knowledge capacity throughout the value chain processes especially with farmers and hatchery owners' by ensuring availability of adequate extension service providers who can transfer technology and know-how to breeder poultry farms, hatcheries and commercial farms.

Finally, it is crucial for the Local Government Authorities (LGAs) to develop an inventory of all key players in the poultry sub-sector and take deliberate efforts to engage them in the planning, development and regulation of the sub-sector. In addition, facilitating Public Private Partnerships that will include Faith Based Organisations (FBO's), Civil Society Organisations (CSO's), Private companies and individuals will catalyse the development of the sub-sector.

### 2.2 EMERGING RURAL BUSINESS IN THE POULTRY VALUE CHAIN IN TANZANIA: CREATING RELEVANT INSTITUTIONAL ARRANGEMENTS



*Vera Florida Mugittu,  
Country Coordinator, RIU Tanzania*

I am a Tanzanian woman, trained as an agricultural economist. I have worked in the agriculture sector in Tanzania for the past 15 years. I spent 6 years working at the village level with a livestock program before I moved to work with a donor organization at the national level. My first 10 years of work made me see the wide gap existing between the national development agenda and rural realities. I later resigned and decided to become self employed in the private sector. I thought that I would never have the opportunity to work on bridging that gap, until I joined the Research Into Use (RIU) Programme in June 2008.

I became one of the six RIU country programme coordinators in June 2008 with my counterparts (all men) working in Malawi, Rwanda, Nigeria, Sierra Leone and Zambia. The DFID-funded RIU Programme is an action research programme aiming to maximize the poverty eradication potential of previous investments in the renewable natural resources research by experimenting and collecting lessons on what works or doesn't work in putting research outputs into use.

RIU's initial focus to achieving this aim was to create innovation systems which continuously demand and utilize new knowledge and in the process promote rural innovation. To be honest, I was not entirely clear of what I was supposed to do to achieve those objectives. When I consulted my fellow country coordinators in an effort to learn about their programme implementation, I learnt that they were as stranded as I was. Soliciting advice from programme advisors, both in Uganda and UK added more confusion. At that point I realized two things that transformed the way I perceived the programme. First, there was no clear blue print for programme implementation, and second, RIU was a pilot programme and we were all learning.

2.2

Commercialisation

My employment contract included detailed terms of reference spelling out generic managerial roles as the overseer of the RIU programme in Tanzania and my duties to coordinate activities to implement the programme. Initially the programme was led by a strategy document titled “*Demand Led Innovation*”. This strategy was abandoned in August 2009 after the RIU programme went through a series of reviews. This change provided our country team the opportunity to develop our own strategy and implementation plan titled “*The Intervention Logic*”. The new document defined the vision, statement of ambition and anticipated milestones for our programme. It was not a binding project document but a description of how we intended to run the RIU experiments in Tanzania. We did not develop a log-frame but had milestones to report against every quarter and adjust accordingly. Writing the intervention logic document was the beginning of our journey towards developing institutional arrangements necessary to commercialize the indigenous poultry industry in Tanzania.

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## COMMERCIALISING THE INDIGENOUS CHICKEN INDUSTRY

When RIU began working in the indigenous poultry industry in Tanzania in 2008, the sector was disorganized with no significant commercial value apart from the value of the 35 million chickens all kept under an unregulated low input free-range system. The sector was worth about 140,000,000 TZS (approximately 117 million USD). The low economic value made the sector neither important to the government nor attractive for private sector investment. The reasons for low commercial value were many; the number of chickens raised was very small, informal and farmers kept 5 to 10 chickens for about a year or more mainly for subsistence consumption. Transactions in the subsector were consequently small, informal and unrecorded. Keeping indigenous chickens was mainly a backyard activity that did not necessitate serious investment from hatcheries because breeding was all natural. There were no transactions on feeds because the chickens were free ranged, and there were few transactions on veterinary drugs and extension services as the chickens were hardly ever treated or vaccinated. The marketing of local chickens was informal and no value addition existed.

Our job was therefore to transform the indigenous poultry industry to be both commercially viable and inclusive of small local producers. We knew this could only be achieved if the industry is made attractive for investment by both the Government and the private sector. Most importantly, small producers had to be made viable for urban businesses to deal with. At this point, the vision to commercialize the sector was clear but before it could be realized we had to answer a lot of questions. The big question was how? How can we make a sector, which is dominated by backyard activities, attractive for investment? How, and where, do we start? How much time and financial resources do we need? Which partnerships are needed, and how do we establish them? And what would be our position in all this? What kind of skills do we need to manage these processes? What rules are needed? All these and many other questions became very important to us. We chose not to look for answers but decided “*to cross those bridges when we got to them*”, and this became our approach, i.e. to work on every bottleneck that we come across and make decisions based on the context and nature of the problem. We built solutions as problems emerged. Therefore, we chose to focus on the vision of a commercially viable industry and did whatever it took to achieve that. This was an ambitious mission and we were expected to play many and different roles. At the centre of all this, we had to ensure relevant capacities were built to sustain the upcoming industry.

The decision to work in the Coast Region was made earlier during the global RIU programme planning process prior to recruitment of the Tanzania country team. The choice of the Coast Region was interesting as many projects and Government programs tried to avoid the region because coastal people were considered lazy and lacked motivation to engage in agri-business or development activities. At the onset of the RIU programme, various technical reports, oral presentations from experienced development actors who have worked in Coast Region and numerous political speeches were clearly raising concerns about the choice for the project area. While its proximity to the commercial capital, Dar es Salaam was

ideal, the message was always the same: the **attitude** and **entrepreneurship capacities** among the people in the Coast Region were very low and may not be able to trigger the support needed or sustain any rural development initiative in the region.

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## THE FIRST STEPS

Our first assignment was to conduct a functional analysis which determined which functions were required to commercialise the sector. Based on the functional analysis we carried out a stakeholder mapping exercise to identify those who were performing identified functions as well as the gaps that existed. Stakeholders included those who were producing chicks, manufacturing feeds, importing veterinary drugs, producing cages for carrying chicks, selling inputs in the villages, selling live chickens, providing business training, etc. All stakeholders identified during the mapping exercise were then called to attend the first stakeholders meeting and formed a platform. Ideally, this platform was meant to stir development in the subsector. However the focus on platforms shifted to small networks based on the need. At this point the typology of stakeholders was variable ranging from farmers, input suppliers, extension agents, live chicken traders, business advisory services providers, Local Government Authorities, regulators, etc.

It was during the first meeting that it became clear to us that the indigenous poultry industry had great business potential if the volumes handled by each actor increased to levels that made business sense. It also became clear that certain institutional infrastructure was missing to stimulate businesses in the rural areas as well as to link them with urban dynamics. For example, rural producers could not produce significant volumes because they lacked skills, had no access to inputs, no access to credit, no access to extension services, had no markets, and more importantly, they had no access to day old chicks. Therefore they could not decide on the scale.<sup>1</sup> On the other hand, input suppliers, extension workers and marketing agents were not attracted to extend their business to rural areas because of low demand. These challenges were among the many “*chicken and egg*” situations that RIU came across. So the question here was how could we make the rural producers produce larger volumes if there are no inputs supplied in their areas? Likewise, how do we entice input suppliers to establish businesses in the rural areas if there is no enough demand? RIU had to innovatively build farmers capacity to demand and pay for significant volumes of inputs while at the same time helping input suppliers to invest in setting up businesses in rural areas. Since both farmers and input suppliers were not bankable, RIU had to act as a financial institution and provided soft loans in form of inputs through a coupon system and later on through a contract farming system. Both systems were used to ensure farmers were able to access inputs like feeds, vaccines and drugs and pay back the loan upon the sale of chickens.

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## INTRODUCING SMALLHOLDERS TO NEW PRODUCTION SCALES

One major decision made by the programme was to push small producers to new scales. Farmers were asked to raise 100 chicks with the plan to move into 200 and later to 300. This was meant to solve the volume challenge and stimulate business to service this new demand. It was also meant to justify the introduction of new poultry management systems in rural areas which includes introducing the use various inputs like chicks, feeds, vaccines and drugs which were not used before in the rural areas. The ability to introduce and sustain this new scale required a lot of reorganization in the sector since most players were not used to working with rural producers. RIU organized a number of meetings between and among stakeholders to sensitize, encourage and support them to develop interest and mechanisms to work with small-rural producers.

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<sup>1</sup>Small producers were relying on natural breeding where the number of chicks was determined by the hen's laying and hatching capacity. It's only through buying chicks, that farmers can decide on the flock size they want to keep and plan accordingly.

The process of initiating indigenous chicken keeping on a new scale involved mobilization of farmers, by introducing them to the idea of raising 100 chickens which obviously required them to learn new practices. The programme used district champions who are also farmers appointed during the first stakeholder meeting to mobilize their fellow farmers. The champions were empowered to believe in the commercialization dream so that s/he could convince other farmers to take up commercial indigenous poultry farming. Farmers bought and believed in the vision mainly because they were assured of support from RIU throughout the process. RIU promised to work with relevant stakeholders to solve all bottlenecks that farmers faced.

Farmer mobilization lasted for three months and during this period experts in building chicken sheds and general poultry husbandry visited the champions for a short period to assist in orienting farmers on what commercial poultry keeping entails. In the end, interested farmers were asked to build chicken sheds using cheap locally available materials as long as the shed met the basic requirements such as proper aeration, lighting and size. The idea of buying chicks was then introduced to farmers and they raised questions around affordability and skills to raise day old chicks, a duty usually done by the mother hen. The question of affordability was also important to chick producers and other poultry input suppliers who wanted to be sure of the buying capacity of their client before-hand.

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## MEETING DEMANDS FOR NEW KNOWLEDGE

Imparting skills to care for day old chicks was critical to the commercialization process because farmers had to manage them every time they start a new production cycle. The existing government extension system and the farmer field schools approach could not provide the mentorship required. Farmers needed on job training while in their own environment. We experimented with the idea of using livestock production certificate holders from vocational training colleges. Before RIU, these graduates were not known to be employed by the government and the private sector did not recognize their role, not even in the large scale livestock farms. RIU organized a meeting with the graduates and asked them to live with farmers and guide them for 30 days as “*household poultry advisors*”. Farmers accepted to house them and terms of reference for provision of poultry training and advisory services to farmers were drawn up. Once this was done the champions introduced the household advisors to the Local Government Authorities and submitted their profiles and the terms of reference. The idea was to use the certificate holders for the first 30 days and then leave the work for the Government extension staff to take over. This was not an easy arrangement as some District Government extension staff were reluctant to advise farmers after the “*household advisors*” had left. This was reported to the District Authorities and where satisfying solutions were not provided, farmers opted for private veterinarians at a cost.

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## CREATING CREDIT SYSTEMS

In order to get the business ball rolling in the villages, RIU had to take care of farmers’ purchasing power to encourage service providers to invest in setting up businesses up to the ward level. Therefore, after farmers had negotiated prices with suppliers RIU agreed to pay for 60% of the cost of 100 chicks as a soft loan to the farmer. Farmers paid the remaining 40% before receiving the chicks. RIU recovered the 60% after the chickens matured and were sold. Farmers paid the 40% through their champions and after the shed was inspected, they received a box of 100 chicks, a household care taker, 2 drinkers, 2 feeders, a poultry keeping guide book, a laminated vaccination calendar, an exercise book for record keeping, charts showing the type of records to be kept, a pen and coupons for procuring vaccines, essential drugs and bags of feeds enough for one month.

RIU had two reasons to subsidize the cost of vaccines, drugs and one month feeds in the very first month of production. The first reason was to give every farmer the opportunity to test the new technologies involved in the new poultry management systems we were promoting. The argument here was that, “If farmers are not assisted to try the technologies, how will they know their usefulness?” Secondly, RIU wanted to ensure that a large number of chickens survive to maturity to demonstrate to farmers that indigenous chickens can enter the market in four months. A large number of chickens were also required to survive to maturity in order to develop other parts of the value chain as well as the market and marketing systems.

On the other hand, RIU had a great challenge when we learnt that some stakeholders from the supply side did not have the needed capacity to respond to the new demand created by increased production scales. RIU had to provide or support them to access new technologies, skills and even finances. For example, one chick producer attending the first stakeholder meeting mentioned that his incubators could produce 60,000 chicks per week if there is demand. But he could not produce even 2,000 chicks per week when the first order from farmers was given to him. It was until he was asked to produce at full capacity that he experienced problems associated with producing larger volumes of chicks. Problems like availability of such a number of fertilised eggs, technical problems related to the hatching machines, availability and quality of parent stock to increase egg production, management of larger parent stock, transportation of eggs from distant places, availability of breeder feeds and many others became visible.

At this point, RIU had to advertise on paper and organized a meeting of interested indigenous chicks’ producers. The response was very good but most of them had very little capacity, were facing a lot of challenges, or their prices for day old chicks were artificially high due to scarcity. In the end RIU was left with 13 hatcheries some were new and some were already in business but at a very subsistence scale. It was at this time that RIU realized the need to invest in hatcheries in order to solve the chicks supply problem. About 300 million Tanzanian Shillings was invested as matching loans to 5 hatcheries which was used to procure bigger incubators, expand parent stock size and to finance some construction work. The loan was paid back in form of day old chicks supplied to farmers. This investment was expected to increase the production of chicks to about 7,500 chicks per hatchery per week.

Before RIU decided to give loans to hatcheries, attempts were made to access loans from different financial institutions without success. The hatcheries had no collateral and the time needed to process the loan did not match with what was developing in other parts of the chain. Farmers had already tied their little resources in building sheds, other input suppliers had also tied their capital preparing to service farmers in the rural areas, and all these needed the chicks to be distributed urgently to set the business in motion. In order to keep the momentum going, RIU had to fill in the gap as the lender.

## SUPPORT SERVICES AND REGULATION

Supply of veterinary drugs and vaccines also posed some challenges to the whole process. Some drugs were not available in the country as a result of the government policy that requires importers to have permits for drug importation. The quality of drugs also became an issue that could not easily be addressed by regulatory authorities. To address this challenge in the short term, RIU identified Bytrade as a trusted drug supplier to work with very closely. The relationship with Bytrade provided room for legal action if poor quality drugs were supplied. However, Bytrade could not supply all the drugs and all the quantities needed. RIU had to often sit with Bytrade management asking them to adjust accordingly. We also used Bytrade as advisors to farmers and to chick producers whenever new technologies regarding veterinary drugs and vaccines were needed. For instance, we approached Bytrade to investigate and train our partners specifically feed producers on using poultry feed supplements like premixes and enzymes which were new to most feed producers in Tanzania.

As poultry volumes increased and more actors came in, the sector had to be regulated for quality and standards. At this point RIU had to work closely with the Ministry of Livestock and different policies were influenced. Stakeholder mobilization also became important and the sector is becoming more organized.

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## OUTCOMES

After all this work, the sector is now ripe for investment and private individuals are progressively investing in the sector. By using public funds from DFID, RIU created a network of more than 3,500 farmers keeping between 100 - 300 chickens which are available for the market every three to four months. In total these farmers are providing about 50,000 mature chickens ready for consumption every month. The volume is also increasing as more regions are covered and more farmers are being recruited through contract poultry keeping. Contract farming assures farmer's ability to purchase inputs including chicks, drugs, vaccines, feeds and extension services.

There is also a network of 13 hatcheries currently producing over 7,000 chicks of indigenous breeds per week, making a total of about 91,000 chicks that are produced and ready to enter the market every week. Fifteen out-growers have signed contracts to raise medium to large scale parent stocks and supply fertilized eggs to the 13 hatcheries whose full total capacity is estimated at 250,000 chicks per week. A privately-owned grandparent farm has also been established which will work with researchers to ensure a quality supply of parent stock to the 13 hatcheries and to their out-growers.

Stakeholders are also well coordinated to deliver poultry services and inputs including veterinary drugs, vaccines, poultry feeds, extension, technical information and relevant business development services. Contract farming is being rolled out to more regions in Tanzania as well as reaching more farmers in the current regions. Moreover, more vulnerable groups like the elderly, people living with disability (i.e. the blind, physically challenged, deaf, albinos, etc.) are being supported to enter into poultry contract keeping.

The infrastructure justifies further private sector investment, possibly in marketing, processing, export, etc., as well as attracting urban dwellers to do business with rural enterprises. It also attracts government attention for both regulation and support. Research and new knowledge is also demanded and justified. In the end, rural producers are increasingly doing more business with urban investors who were initially not interested to work with them. More importantly household nutrition is improving as chicken meat becomes more available.

When I look back at the progress we have made in two years, I cannot help but feel proud of the success we have garnered in advancing the indigenous poultry industry in Tanzania. I am proud of the level of energy the programme has managed to mobilize along the entire value chain. I am proud of the institutional arrangements that emerged. I am proud of the significance of the organizational and behavioural (especially attitudinal) changes that took place within such a short period. I am also proud of how RIU has demonstrated the importance of having an innovation broker who is equipped with resources and flexibility to solve different kinds of bottlenecks, coupled with a political will to support and finance solutions needed to establish the infrastructure necessary to stimulate efficient private sector engagement in a particular sector or commodity chain. It is indeed an opportunity for other development actors to learn from. It is worth learning how much can unfold when the right approaches are used.

There is also a serious message to this story. I am deeply concerned about the sustainability of all these efforts and achievements after June 2011 when the RIU programme ends. The closure could not have arrived at a more inopportune time. Businesses have just emerged and still need more support to stabilise and sustain the upcoming subsector into a vibrant and self-regulated sector. As I explained earlier, farmers were introduced to new scales and it goes without say that a lot of support and time is needed before they fully adjust to the change. For example, a minimum of five production cycles might be needed before they become confident, financially stable, and able to continuously produce at such a scale. Moreover, investment to recruit more farmers<sup>2</sup> is still needed to produce volumes needed to stimulate investment in chicken meat markets and value addition.

Another concern is the immaturity of the investment put by input suppliers as a response to the new demand from farmers. There is yet a sufficient supply of quality inputs like drugs, feeds and vaccines in the country, and with without those inputs farmers cannot sustain their businesses because of the high risks. Likewise, without farmers sustaining their businesses, input suppliers cannot continue to invest to achieve the needed quality and quantity to supply the growing market. So the question is who will steer the ship and keep the progress on course while these new businesses continue to stabilize? Honestly, public support is inevitably required here to strengthen the sector as it transits from the backyard to the GDP basket! Anything less will mean all the investment will crumble and farmers will have the most to lose!

*“Mama Maimuna Mkongea from Rufiji District in Tanzania once told me; ‘I have been living in a cave all my life. Then RIU came and pulled me out. It took me time to adjust my eyes to the new light and to know that I can actually walk, jump and run. After the short period of awe, I am now ready to learn to walk and live out of the cave. I now know I can do big business with urban people using a chicken that I have always kept in my kitchen. RIU can’t leave me now, at least not until I can do everything on my own.’”*

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<sup>2</sup>Larger volumes of mature chickens are still needed to stimulate investment in slaughter houses and exports. While the option could be to increase individual flock sizes i.e. from 100-1000 birds per farmer, this is not always possible because most farmers have small farms (usually less than 2 acres) providing them with limited land carrying capacity. So the only option is to go for more farmers.

## 2.3 THE CHAIN BROKER: A NEW WAY OF FORMING SUSTAINABLE PARTNERSHIPS AND LINKAGES FOR THE SUCCESSFUL COMMERCIALIZING OF THE INDIGENOUS POULTRY SECTOR IN TANZANIA



*Jwani Tranquilino Jube (left)*  
Programme Officer – Communication, RIU Tanzania



*Matilda Mndeme (Right)*  
Field Operations Officer – RIU Tanzania

Whether in business or in development, partnerships emerge, not only out of need, but also out of an understanding that more can be achieved through collaboration than on your own.

When RIU started an intervention to commercialise the indigenous chicken industry, everyone was interested to participate. The major question then was how to form practical and lasting partnerships to respond to the difficult challenges within the poultry subsector. Different skills, knowledge, abilities, resources and systems were needed to facilitate delivery of effective and efficient services and inputs to rural farmers. However, due to the complexities within the subsector which was marginalised and subsistence oriented, RIU was challenged to look beyond traditional ways of partnering and introduce and nurture new ways of linking stakeholders.

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### THE SITUATION BEFORE RIU

Until early 2009, stakeholders in the indigenous chicken industry were scattered with most farmers in rural areas. The few hatcheries in operation were in urban areas but never produced indigenous day old chicks for selling. If they ever did produce day old chicks it was for sale to friends and neighbours and not commercially. Livestock input suppliers were in urban areas as well but they never really dealt with rural poultry farmers. Extension and advisory systems for poultry were almost non-existent. There were barely any formal organised transporters or organised markets nor marketing systems. All the actors in the industry operated individually and did not know of the existence of similar or complementary partners. With all the market confusion our major dilemma was to know where to start.

RIU had to take on a role of being a chain leader responsible for chain brokering, a gap that was not fulfilled by any stakeholder in the country. The programme started by identifying all stakeholders in the indigenous chicken industry. The initial idea was to link stakeholders through an innovation platform. Platforms were thought of as an effective way through which stakeholders can be linked and can be facilitated to work together to analyse their system problems and propose solutions to improve the functioning of the indigenous chicken industry.

Platforms succeeded immensely in increasing connections and direct interaction among stakeholders in the sub-sector. However, at the practical level, a different force beyond linking partners was needed to jump start operations. This was due to the nature and capacities of stakeholders in agriculture and livestock sectors. For instance, after stakeholders were linked through platforms, they were not able to immediately start operations due to their low financial or knowledge capacities. Farmers knew district agro-dealers but their purchasing power was still too low to buy inputs or pay for advisory services. Agro-dealers knew input importers and manufacturers but they still didn't have the required financial capacity to buy and stock the required amount of inputs. At this point the introduction of new rules, practices and principles were needed to allow partnerships to practically function and solve the problems in inputs and service delivery.

Due to the complexities in communications, varying capacities and energies among stakeholders, RIU had to continue being a broker even after the linkages were established. The programme had to continue coordinating all logistics. This included communicating with hatcheries and farmers, checking for quality control (particularly of chicks), coordinating feeds and other inputs delivery, transportation of chicks and matured chicken, and organising traders and marketing systems. Our role also included mediating conflicts among farmers and service providers or farmers and the Local Government Authorities. In a system where stakeholders were weak and scattered, the presence of a committed leader and coordinator of processes proved to be very crucial to ensure that all stakeholders were on the same track. A committed leader also ensured the necessary solutions were planned, synchronised and implemented at all levels to reach intended outcomes to boost the growth of the industry.

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## CHANGES FROM THE PLATFORM PHILOSOPHY

After a few months of operation, RIU had to revisit and revise its ideas concerning partnerships. Considering the marginalised and subsistence nature of the indigenous chicken industry, the programme had to abandon the idea that partnerships have to revolve around the platforms. Platforms became more expensive to maintain and platform meetings to do system analyses were too costly to hold. Some platform members didn't have the time to sit in platform meetings. Also in some cases, not all members of the platform were needed to debate and find a solution to a particular problem. For example, when there was shortage of indigenous day old chicks, it was practical for RIU management to issue a public call for supply of chicks from other producers than to have a platform meeting to get recommendations. Some challenges required spontaneous and quick solutions and, in such cases, operating around the platform philosophy was not practical.

Due to these challenges, a new way to forming partnerships was adopted. Each partnership was formed on the basis that it was needed to solve a particular challenge and at a particular time. For example, the programme initially focused a lot of energy on solving the chicks supply problem to ensure a stable supply of indigenous day old chicks to farmers. Issues of markets and processing were not dealt with until six months later when farmers had matured chicken to sell. This allowed the programme to effectively address smaller issues within the main challenge.

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## THE VALUE OF HAVING A WIN-WIN SITUATION FOR ALL STAKEHOLDERS

To encourage efficient and reliable service and inputs delivery, partnerships were formed with business principles in mind. Each stakeholder went into a partnership with something to gain, a principle that is not often practiced in agriculture projects and programmes.

In most cases however, the win-win situation was not necessarily visible at the beginning of the partnerships due to different capacities and needs among stakeholders. In such cases, RIU (as the innovation broker) had to take the role of making weak partners viable for large stakeholders (e.g. hatcheries, drug and vaccination suppliers), especially those in the private sector. For instance, feed producers and drugs suppliers were both operating businesses but they had never viewed a large number of smallholder farmers as their main clients. Originally they were servicing large-scale farmers mostly in urban and peri-urban areas. RIU had to come up with a system to showcase that when smallholders gain enough financial capacity they can be a profitable client for inputs suppliers. For example, in Coast Region, RIU introduced a credit coupon system (which served as an interest free loan to farmers) to help smallholder farmers to access inputs from district agro-dealers. Through the system, RIU provided farmers with different coupons for specific inputs which they submitted to the agro-dealer in exchange for inputs. The agro-dealer would then later submit the coupons and names of farmers to RIU and claim for refunds. Farmers would repay back their loans to RIU after they sold their matured chickens.

The system ensures that while the farmer is going through their first production round, they are able to immediately start a partnership and access inputs from agro-dealers. At the same time, the agro-dealer is able to provide services and inputs to farmers while waiting for his/her purchasing power to grow. Such support has enabled the growth and establishment of partnerships between agro-dealers and farmers at the district levels.

A major contributing factor to making the innovation work was the presence of RIU as the broker at the centre, linking stakeholders and finding solutions for problems in the industry. With RIU at the middle, the hatchery owners and the booming number of farmers could be linked. The hatchery owners invested more in indigenous chicks production, knowing that there were farmers who will pay for chicks at the other end. With RIU as broker drug suppliers, who had been selling poultry drugs before albeit in smaller quantities, increased the volume of drugs being ordered and began to bridge the demand/supply gap.

RIU also acted as the informed and trusted voice linking stakeholders. For example, in signing contracts, farmers expected timely delivery of chicks without being aware the complex logistics involved before RIU delivered the chicks. The RIU team had to continuously communicate with farmer representatives (champions) and update them on what is going on, so that they can inform and update farmers in a timely manner.

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## THE VALUE OF FLEXIBILITY

Another important aspect that led to successes in sustaining partnerships was that they were based on open ended planning and responsiveness to changing needs. In each case, new partners were voluntary allowed to join activities anytime and to leave whenever it was seen that their tasks had changed or had been accomplished. The flexibility was a key requirement from stakeholders who saw it as an opportunity to sustain performance. This ensured that those who performed and delivered continued to remain in the system, and those who failed were replaced by new partners. Basing partnerships on performance rather than on formal contractual agreements forced most of the stakeholders to make the choice of performing and delivering or being excluded from the process. For example, in the case of chicks production and supply, quality was continuously enhanced as the demand for better quality chicks increased from farmers. However, the flexibility has its consequences in some areas. For instance, when stakeholders, such as drugs suppliers, sold low quality drugs to farmers, they were just dropped but there was no way of holding them accountable for losses incurred by farmers or the programme.

In terms of the public-private partnership the flexibility of the public partner to respond to changing and unpredictable needs and opportunities increased access to services among farmers as well as enhancing the programme outcomes. For example, in Chamwino and Mpwapwa Districts, the flexibility of the District Councils to work with RIU and accommodate poultry activities in their operations to provide combined and coordinated support created the best environment for farmers to easily engage in indigenous poultry keeping. It also allowed farmers to easily access inputs and advisory services.

At the grassroots level, informal partnerships and networks among farmers were preferred to formal farmer groups and structures. The informality in farmers' networks eliminated the bureaucracy and was considered by farmers as an effective and efficient way of quickly responding to system problems. For instance, in Rufiji District, farmers operate their enterprises individually but come together only in cases where they need to collectively advocate for particular issues, access financial services, inputs or markets, mobilise for resources and acquire information.

In each region that RIU was working in, farmers were required to operate and own their enterprises individually, but were linked to ward and district informal networks. Encouraging farmers to have independent enterprises (not group projects) increased the level of ownership, commitment and learning. However, in all the cases RIU encouraged having a network of 20 or more farmers in a village or ward to ease service delivery and to increase cooperation among farmers who could use the networks to mobilise for resources and reduce costs.

In sum, we have learned that for innovation to occur in a sub-sector that is dominated by small-scale stakeholders, formation of partnerships has to allow flexible terms for partners to explore new ways of working. In some cases, it is necessary for stronger partners or innovation brokers to support weak (small) partners to get some processes forward and unblock challenges in the value chains even when the weak partners are not in the best position to negotiate.

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## THE VALUE OF CHAMPIONS

Another success factor in managing local grassroots relationships was using farmers as leaders (champions) in coordinating and managing their own relationships. There is a District and Ward champion in each area that is responsible for linking farmers with RIU and vice versa; linking farmers with Local Government Authorities. Champions that were also farmers proved to be key actors in mobilising other farmers to engage in keeping poultry commercially. For instance in Coast Region there is a District champion in each district. In Rufiji District alone there are 11 champions (1 district champion and 10 ward champions). The local network of voluntary leadership promoted self-organisation of farmers for access of inputs, services, markets, information and sharing and reducing operational costs.

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## THE VALUE OF NATIONAL LEADERSHIP

In order for a nation to ensure an emerging industry is successful they must first nurture it to a point where it can stand on its own feet. Currently, within the indigenous chicken industry, the burden of ensuring inputs and services are reaching farmers has been carried on the shoulders of RIU alone. The reality is that this industry is a great economic opportunity for Tanzania and therefore the burden of ensuring the growth of the industry should be a public responsibility, supported by the Government, until the sector can stand on its feet. RIU has proven the viability of the industry and has supported it from its infancy and now it's time for greater leadership on the part of the Government and other key stakeholders in terms of involvement and coordination.

A woman is seated, wearing a white headscarf with a large orange and black feather design. She is dressed in a patterned purple and white top with large orange and black floral motifs. She is holding an open book with green and white pages. The background shows a rustic setting with a mud-brick wall and a wooden door.

## SECTION 3: KNOWLEDGE

### 3.1 STIMULATING DEMAND FOR NEW KNOWLEDGE IN THE POULTRY SUB-SECTOR



*Eliasa Saidi, Trainer in Business and Entrepreneurship*

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Knowledge

Innovation in agriculture and livestock sectors is successful when farmers have the capacity to willingly and consciously demand for new knowledge based on their needs. Equally, innovation is successful when farmers are able to learn to ‘search for new knowledge’ and integrate that new knowledge in their existing farm management practices and improve productivity.

This was the case when farmers engaged with RIU received their first 100 chicks bought through an interest free loan. From the moment farmers received the chicks, they realised that they needed to change their management practices as they had to care for a larger number of chicks than they were accustomed to. The increased responsibility to look after a larger flock stimulated the demand for new knowledge. This new desire to learn in order to do better was triggered by the perceived profit to be gained if the entire flock survived to maturity as well as the loss to be incurred if anything went wrong with the chickens while they had a loan to pay.

When farmers expressed the desire for new knowledge, and when it was made available to them, they immediately embraced it, put it to use and changed their practices. We in the program started to witness farmers investing more time and working hard to safeguard their investment. Unlike before, farmers sought and implemented all extension messages since they wanted to bring all the chickens to maturity and sell to repay their loans. Suddenly, it became critical to them that they understood the kinds of diseases that affect chicks and chickens; the kind of drugs needed to treat different diseases; nutritional requirements and the related quality and quantity of feeds to be given to each age category of chicks and chicken; types of records to be kept, etc. At the same time, they learnt to how to seek advice from both public and private extension workers in order to manage their poultry enterprises profitably. Therefore, the new desire to maximize profit brought about by the new scale of production increased the demand for skills and technology.

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#### DEMAND FOR NEW KNOWLEDGE

Before RIU, the demand for knowledge on poultry was just “potential” and not “active” demand. Farmers had the potential to learn from the government extension staff or from other sources including poultry development projects but they found no reason to do so. For example, a farmer with two chickens squatting in the family kitchen was not motivated to learn about building appropriate chicken sheds or on how to manage and control poultry diseases, etc. So the new scale justified the purpose and cost of new knowledge and hence made the demand active.

So we at RIU decided not to provide knowledge before users expressed the demand. However, since we knew how inactive the demand was, we also worked to stimulate it. For example, we encouraged farmers to move to higher scales so that the need to build sheds was justified (i.e. 100 chickens would definitely not fit in the kitchen anymore), also by giving loans the need to reduce mortality rates was justified etc. The program also refrained from providing on-off-classroom training and chose to provide on job training and coaching to allow users to directly link the need and the use/solution. It was decided that farmers should be allowed to experience some processes before they are fully trained so as to allow a reflective understanding of concepts and content linked to personal experience. Consequently, farmers received a deeper training after three months of chicken rearing. Hatchery owners were also trained on job and after they had gone through the production processes.

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## HOW KNOWLEDGE WAS IMPARTED

The first thing RIU farmers learnt was that “In order to eradicate income poverty, they have to gain more income; And in order to gain more income, they have to be able to sell more. And in order to sell more, they have to produce more; even more professionally and therefore they need to learn new things and practices.” Basically it is the farmers’ new realisation of the value of learning and their demand for expert support that gave RIU a convenient room to intervene in appropriate ways and consequently designed learning systems and tools that allowed farmers to learn new skills and stimulate knowledge utilization. There were three major areas of knowledge mostly demanded by farmers. The first is general poultry husbandry, which includes chicks rearing and brooding, disease control and management, feeding and nutrition, poultry housing and management, etc., and the second is entrepreneurship and business management training. The third one is counselling to change attitudes and empower farmers to take more risks, increase self-confidence, lower dependency syndrome, overcome myths about business, etc. The later type of knowledge was continuously provided by program staff who always focused on pushing farmers beyond their comfort zones by encouraging them to take full responsibility of their lives by embracing new ways of doing things in order to better their livelihoods.

The knowledge on general poultry husbandry was provided on-farm through a mentorship approach where a trained household advisor was allocated to every ten farmers. The advisor lived with one of the farmers and provided practical training to each farmer in the comfort of their homes. Advisors stayed with farmers for a period of 30 days, coaching farmers on daily basis as chicks grew. Since farmers could directly see and apply lessons such as feeding, vaccinating, disease inspection and so forth, they much quickly recognised and appreciated the power of new knowledge. Most of them claimed that the hands on approach enabled them to absorb new skills and knowledge relatively faster than when taught in a classroom. A tailored poultry husbandry book was also made available to farmers for future and regular reference. The book is written in a very simple language and with powerful illustrations which was promoted among household members who could read together and assist even the illiterate ones.

RIU also hired business management and entrepreneurial skills trainers who trained farmers during the second or the third month of their poultry business cycles. That timing seemed very strategic and opportune because by then farmers had identified themselves with basic aspects of the enterprise and therefore related very well with the content of the course. They also participated actively in discussions and were also able to share personal experiences. The training was simplified and made very appropriate for rural adult learners. It used a simulation module which ensured sufficient interaction among participants while allowing them to explore different scenarios for decision making regarding running profitable poultry enterprises. Specifically, farmers learnt how to deal with risks, manage changing business environment, the importance of keeping records, proper pricing, saving and investing. This training was crucial because it enabled farmers to learn the value of planning and assessing different business situations and made appropriate decisions for businesses to survive and thrive.

Apart from direct training, regular feedback sessions were also organised where farmers discussed problems and issues that needed clarity or practice. It is during these meetings where demands for knowledge were made clear. Farmers shared experiences on individual solution seeking behaviour from which some farmers managed to learn from others. Major problems that needed training were also raised and plans for imparting the needed knowledge were discussed and agreed. For example, when most farmers failed to save for re-investing in the second production cycle, meetings were organised and training on importance of selling at wholesale was done in order to receive lump-sum payments and be able to save.

Other actors in the chain like input suppliers, feed producers and hatchery owners also demanded for new knowledge as their businesses evolved and as demand for quality increased. For example, when farmers demanded for better quality chicks, and as the size of parent stock increased, chick producers had to learn new skills on hatchery and parent stock management. So the program contracted a hatchery expert who stayed and mentored each hatchery team.

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## CHALLENGES AND LESSONS

One of the biggest challenges in absorbing new knowledge in Coast region was the culture and attitudes of the people. This was however overcome by the use of local champions to mobilise and recruit farmers. The approach used for poultry husbandry training also ensured that more than one person in the household was trained and understood how to manage the chickens. Thus even in cases where one family member left the flock unattended others would step in and do the needful. As changes occurred at the household level they influenced the views and attitudes of other members within and outside the household who might have been rigid to adopt new knowledge.

In all, stimulating business in the indigenous poultry industry must go beyond simple training. It has to first ensure that the attitudes and culture that threaten the acquisition and absorption of new knowledge are addressed and mitigated. It is also imperative that once demand for new knowledge is generated, a programme or project has to be able to meet that request with practical and realistic learning methods. Ensuring the access to new knowledge is crucial since new knowledge is constantly required for the innovation chain to continue creating value at each level.

The program has clearly learnt that, every growth step in business justifies the need for new skills. Hence, the program focused more on stimulating growth rather than on imparting new knowledge first. RIU waited for the demand even where it was certain that a particular knowledge was useful to a particular user.

### 3.2 MY KNOWLEDGE WORKS: CONFESSION FROM A VOCATIONAL TRAINED POULTRY ADVISOR WORKING WITH INDIGENOUS CHICKEN FARMERS IN COAST REGION IN TANZANIA.



Leah Kimiro,

Household Poultry Advisor under RIU Poultry Project

#### CERTIFICATE HOLDERS SHOULD BE USED TO IMPART POULTRY KNOWLEDGE TO FARMERS

My name is Leah; I hold a Certificate in Poultry Management from Kibaha Education Centre, in Coast region. I began working with the RIU poultry project in 2009. In Tanzania, provision of agriculture and livestock extension services is normally done by those with a diploma or higher qualifications. This means that those of us at certificate level are never used to provide extension services. This is due to the idea that those at the certificate level are not qualified to impart knowledge to farmers. However, as the number of small poultry farmers increased, so has the demand for more knowledge. This is where our value as service providers has now been realised. Extension officers are overwhelmed and more and more villages have to do without one. An example of this comes from an experience I had in July 2010 when I went to Kisanga village in Kisarawe District, Coast Region. I wanted to meet the extension officer but I was told that the village has not had an extension officer for many years. There are few extension officers in Tanzania and those who are available are already stretched by the numerous responsibilities they have, especially when they also double as Village Executive Officers. Having two important responsibilities in the village means the villagers need them, and similarly, the poultry farmers demand their services.



*A household advisor assists farmers to to set up a brooder for day old chicks. Household advisors were stationed to provide daily hands-on onsite training and demonstration to farmers for 30 days. Where capacities are low, it is very necessary to help farmers build their capacity (especially learning by doing) first before they can seek and utilise knowledge and technologies to improve their livelihoods.*

I do not understand why this has to be the case. The Government has built colleges that churn out certificate level trainees in agriculture and livestock annually and has incurred the cost of educating us. I understand that there is an acute shortage of funds to hire us but I still propose that they consider using us to support extension officers especially in places where there is a demand for agriculture expertise. Use us to impart knowledge to farmers and let us take part in accelerating development. We have not been used in the past because the Ministry does not believe we have enough knowledge to impart but that is not entirely true. If you look at the way RIU has utilised our skills and expertise then you have enough evidence to show that we are capable of providing quality service. RIU contracted us for 30 days to support rural poultry farmers that had no previous experience in poultry keeping. We are in essence the ones looking after the project because we protected the investment that RIU and the poultry farmers had made by ensuring that farmers get the right knowledge at the right time in order to manage their enterprises well.

RIU valued our expertise and used us to support small poultry farmers that had no experience in poultry management. There have been good results in the project because of the role we have played. In the past there were many poultry farmers but they did not succeed commercially because they did not know where to start. However, after RIU linked us with them to provide training and services in poultry husbandry we have enabled farmers to manage as many as 100 to 300 chickens. This is contrary to the past where farmers only kept a smaller number of 3 to 10 chickens for household consumption. Indigenous chickens now contribute a significant portion of their household income, even more than other animals such as cows or goats. Poultry farmers' incomes have increased and they are now able to afford school fees for their children and food for their families. They now even have the money to build better housing.

The reason that made the RIU poultry project a success is the way in which we passed knowledge to poultry farmers. We provided hands-on training from three days before farmers received chicks and continued for 30 days from the time they received day old chicks. We helped farmers along the process of learning how to care for day old chicks without depending on the natural cycle (large hens). As a household advisor I taught farmers how and when to vaccinate their flock, the importance of keeping records and the early detection of symptoms of diseases. They also learnt what, how and when to feed the chickens, especially how to achieve the right nutrient balance by mixing locally available feed ingredients as cassava, millet, maize, fish meal, sunflower cake, banana and potato peels and so forth.

I visited 1 to 15 households per day ensuring that they got personal one on one coaching. I cannot over state how the one on one coaching has been the key to knowledge transfer success. Farmers absorbed the knowledge better because they learnt as the challenges emerged and could witness solutions in their own stock. Furthermore, this has been a very dynamic method of imparting knowledge because people in the household learnt together; knowledge was shared with the father, mother and children. Farmers who were illiterate were assisted by their children to keep records which were imperative in tracking progress of the chicken's growth, thus ensuring inter-generational knowledge transfer. I have supported poultry farmers in Chalinze, Kisanga, Kerege, Ikwiriri, Mkuza, Rufiji, Bagamoyo, Mkuranga, Kibaha and Kisarawe Districts. I am proud of the success poultry farmers achieved and I have enjoyed watching them grow in confidence and in their ability to take care of more chickens.

A good example that demonstrates this success is that of a poultry farmer in Picha ya Ndege, Kibaha district. He has grown to a level that he bought his own incubator and is now keeping over 500 chickens. This is very inspirational considering that he used to keep 3 to 10 chickens for home consumption.

The project is also growing beyond farmers supported by RIU. As the success of household poultry advisors work has grown, so has the demand from non-RIU poultry farmers who are seeking our expertise in managing their chickens. The approach used by RIU has enabled us to forge stronger relationships with farmers. They trust our advice and feel confident that we can help them solve problems. We lived with one farmer during the 30 days of contract and we became part of the family. This intimate relationship has made it possible for household advisors to cultivate commitment from farmers who feel at ease to express their anxiety and thus we are able to confront challenges that they face before they grow beyond our capacity to mitigate them. Working with farmers has also enabled us to build a relationship where we are not merely advising farmers but we are taking part in the process that allows farmers to feel a sense of ownership because of the intense level of engagement.

It would be untrue if I said this success came easy. I have encountered many challenges, some of which are tied to culture and tradition. Some tribes along the coast do not believe in joint property ownership and as a result you would need to persuade both the husband and wife to collaborate in selling chickens so they can fetch a better price. However, once they realised the benefits of wholesaling versus retail, they increasingly overcame this entrenched tradition. They kept chickens in batches and sold in wholesale. This way they were able to plan and have the assurance that they will have a lump sum amount and it makes it easier to purchase new stock and organise their lives.

Another big challenge has been poverty. Most of the rural farmers are very small-scale and resource poor therefore could not manage to invest much in their poultry businesses. However, RIU made it possible for them to start poultry keeping through provision of interest free loans in the form of inputs including chicks, vaccines, and feeds for one month thus enabling those who are most in need to take part in the poultry industry.

Although we provided good quality services there is a pressing challenge with the quality and availability of vaccines. This has really jeopardised poultry farmers' profits. Sometimes vaccines were of very poor quality, sometimes they were not available at all or were available when it was too late to vaccinate. Other times vaccines arrived in the remote villages when they had already expired because they were not preserved in the right conditions. As a result, we might vaccinate the flock, but we were not entirely guaranteed of best results. If this challenge is addressed, then I am sure farmers will be able to afford paying us in the future once the RIU project is phased out, or through KukuDeal (the business initiative under RIU).

In all, the RIU project has dispelled the belief that certificate holders are not qualified to provide advisory services to poultry farmers. We are now valued and sought after and, in turn, we are able to help transform the lives of poultry farmers we serve. Certificate holders are also a resourceful pool of experts, we are committed, we are affordable and we are ready to serve.

## SECTION 4: TACKLING POVERTY



## 4.1 HOW INDIGENOUS CHICKENS HELPED ME WIN AGAINST POVERTY AND NEGATIVE STEREOTYPES: MY STORY AS A COASTAL RURAL WOMAN FROM RUFJI TANZANIA



Maimuna Sefu Mkongea,  
Poultry Farmer and District Champion, Rufiji District

*“I want this story to encourage the Government and other non-state actors to realize that small scale farmers are not born or made for poverty, because this is not true, just like the stereotype that coastal people are lazy is not true. What we need is the right approach to educate and empower us and we will slowly transform our conditions ourselves.”*

My name is Bi Maimuna Sefu Mkongea and what I want you to learn from my story is that it is innovation and entrepreneurship that wins against poverty. I have been living in Rufiji District for many years and most of the population is very poor. Unfortunately the Coast region people in Tanzania have always been accused of being lazy and irresponsible to development programs. With the RIU programme we are seeing a reversal away from poverty and laziness. This has been possible through innovative approaches that have stimulated farmers to become entrepreneurs.

### BEGINNINGS AS A POULTRY FARMER

Generally, people in Rufiji never believed that it was possible to train and mentor a farmer into a successful entrepreneur. Even Government leaders at the higher levels had lost hope in finding new ways of addressing poverty in the District. Unfortunately the failure of most entrepreneurship programmes implemented in the District was blamed on the culture of “laziness” amongst the coastal population. The truth is that no one bothered to search further to understand the real reason behind the failures and further decline of local farmers into poverty.

Change started to happen in early 2008 when the Research Into Use (RIU) programme was introduced in Rufiji. RIU started by identifying stakeholders in the industry and initiating the formation of platforms. In Coast Region, a platform for indigenous poultry stakeholders was formed during the first platform meeting. The meeting composed of various stakeholders working in the indigenous chicken industry such as Government extension workers, hatchery owners, vets, suppliers of poultry inputs and small-scale farmers. Local farmers from Rufiji were also represented in that meeting. During the meeting stakeholders identified challenges in the indigenous chicken industry and proposed ways of addressing them. Later during the meeting, specific action plans for addressing the challenges were developed by the stakeholders. Towards the end of the meeting, every District in Coast Region was asked to select a champion to lead the project. I was selected and became a champion for the poultry project in Rufiji district.

As a champion, my main job was to mobilize farmers to join the project. This involved persuading them to change how they kept indigenous chickens from subsistence orientation to business orientation. This was a very big challenge for me. I wondered how I could convince people in Rufiji to join this project after many others had failed before. Fortunately, I got very good support from my family and this gave me the confidence I needed to persist. I began my mobilization work by undertaking an information campaign to the Local Government. I also held meetings with communities at different Wards and Villages. This was followed by collecting information and statistics on indigenous chicken farmers. My commitment and desire to disprove the stereotype that people of Rufiji are lazy allowed me to mobilize many farmers in a very short time. From June to September 2009 I had already mobilized six Wards in my District and by early 2011 I had reached 12 Wards. After each farmer was mobilised they were asked to build chicken sheds as their commitment to the project.

We then entered the learning phase where mobilized farmers were to be trained in poultry husbandry. Most of us had never kept more than 15 chickens especially when they were small day old chicks. We mostly relied on natural breeding from the hens. To train farmers, RIU employed a very practical training method unlike other projects that had been implemented in the past. Training was done at each household for 30 days. Household advisors were used to train farmers. Each household advisor stayed in the village and trained a maximum of 10 farmers. The training started three days prior to the day that farmers received chicks. The training included how to build appropriate shelters for poultry using local materials and how to care for day old chicks until they became mature chickens. We also learned the process of buying day old chicks from hatcheries, immunisation schedules, feeding, disease prevention and general sanitation.

At the initial stage, farmers were provided with interest free loans in terms of inputs to enable them to learn and run their pilot projects. The inputs included feeds, essential vaccines and drugs to cover a period of one month. Equipment like feeders and drinkers were also provided. During the period, RIU was also there to mentor farmers throughout the process connecting farmers to other supporting services, such as household advisors, vets, feeds suppliers, vaccine and drug suppliers, hatcheries and markets.

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## OVERCOMING OUR FEARS TO BECOME ENTREPRENEURS

After the first month household advisors left the villages and farmers were left alone to run their own poultry farms. This proved to be a very challenging period for farmers. Since farmers could not easily access regular advisory services many of their chicks died. Most farmers started to worry because they had never kept such a large stock before. RIU listened to the farmers and then later called them for a monitoring meeting. During the monitoring meeting, most farmers complained about how RIU failed to continue to manage farmers' poultry enterprises. RIU team insisted that the initial training provided for 30 days by household advisors was supposed to give farmers primary skills to manage their enterprises, and that letting each farmer continue on their own was part of the learning process meant to enable farmers to learn and adapt to challenges involved in keeping and managing poultry. The team emphasized that *"you can hardly be able to sell the first cloth you learn to make"* and therefore farmers should not despair. During the meeting we discussed all the problems farmers faced and solutions were proposed. This feedback revitalized the enthusiasm among the poultry farmers and has been the key to their commitment to date.

Later on, during the second and third month, we were then trained on entrepreneurship and business. We learned that it is possible for a small farmer to become an entrepreneur. We learned that to be an entrepreneur one should overcome the fear of failure before they started their projects and be ready to take some risks. We learned it is important to be brave and persevere even when we face challenges. RIU also trained us on markets and how they work as well as how to manage our businesses.

From this training it was easy for farmers to grasp what was being thought. This is because of the practical experience we had from the first two months of running our chicken enterprises. It was also evident from the success stories that followed in the second round after many had failed during the pilot phase. Now most farmers have moved from keeping 15 chickens to keeping 200 chickens.

The support from household advisors was a very critical part of the project as it enabled farmers to receive sufficient attention and customized training to meet their individual learning needs. There was also an open channel of communication that enabled farmers to know who to go to for information and support.

The indigenous chicken project has brought a different perspective to development projects within Rufiji. Most projects failed in the past because they only used to train farmers in classrooms for a few days or even a few hours, only to later leave the farmers to fend for themselves. The RIU project is different because it nurtures farmers through every step made and allowed them to make mistakes so that they can learn from them.

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## EXPANDING INTO CONTRACT FARMING

In 2010 contract farming was introduced. This was received with a lot of joy and enthusiasm in Rufiji. We were excited by the prospect of keeping more than a 100 chickens because to us this was unheard of and seemed to be a farfetched dream. We started by expanding the sheds and forming stronger farmer networks to link people that were engaged with indigenous poultry keeping in Rufiji. We met often and this helped us keep our aspirations alive.

Where there is success there must also be challenges. The challenges that we faced included timely access to quality vaccines and drugs for our chickens. There aren't many agro-shops close to farmers. There is only one agro-shop in the entire Rufiji District. Now, with the increase in indigenous poultry farmers, the shortage is more acute due to the higher demand. Like vaccines, we also face the same challenges in accessing poultry feeds.

No matter what the challenges are the number of people who want to join the programme is growing steadily because of the success of the programme and the fact that the promotion strategy in the Ward has stimulated interest. There are now about 1000 people who are waiting in line to start contract poultry keeping. We have grown from just 5 Wards to 12 Wards that now want to get involved. This has really encouraged me as champion; I have become more confident and bold because I see the results of my efforts in encouraging more people to engage with poultry keeping.

Rufiji is a good example that others can learn from. I have done this wholeheartedly without an allowance or salary because I truly believed in the RIU project. The way I have personally benefitted from the project is by being one of the indigenous chicken keepers through the contract arrangement that RIU organises. I am proud to say that I have increased my income substantially. At first I sold 180 chickens at TSH 5,000. After loan deductions I was left with 500,000 Tanzanian Shillings, which I used to fix my house, build another chicken shed, and pay school fees for my children. The remainder I kept as savings. I am 59 years old and for the first time in my life I have opened a bank account where I keep my savings. I now tell other women that I meet in women groups, on a one to one basis, to look at me and the success I have acquired through the chicken business. They have truly been inspired, especially those who in the past and according to our culture would wait for their husband to be the sole bread winner and provide for them.

I want this story to encourage the Government and other non-state actors to realize that small-scale farmers are not born or made for poverty, because this is not true, just like the stereotype that coastal people are lazy is not true. What we need is the right approach to educate and empower us and we will slowly transform our conditions ourselves. Historically, people from the coast are renowned for being lazy, uneducated and backward, but RIU demonstrated that it is not that the people are the problem but rather the approach. We small-scale farmers have as much right to contribute to development.

I would like to close with the message that the government should be supporting us rather than putting up more challenges. For example the Ward should re-examine the tax on chickens sold, because it is too high and depletes the profit margins we are striving to get. We are still small and so the taxes should reflect our scale. Taxing us rather than nurturing our growth is not the way to encourage growth of the indigenous chicken industry.

## 4.2 IT IS POSSIBLE TO TACKLE POVERTY IN TANZANIA

*Godfrey Anigulile Mwaipopo,*

*Poultry Farmer, Kibaha District*

4.2

My name is Mwaipopo. I am a retired police officer living at Picha ya Ndege, Lulanzi area, Kibaha District. I have been involved with RIU since 2009. Since I started working with RIU I have witnessed women, old people and young people in my community who are now able to tackle poverty after learning how to raise indigenous chicken commercially through the RIU project. This has not only brought great benefits to my community, it has also inspired me to be part of the success story.

The poultry husbandry and entrepreneurship training that I received from RIU has transformed my life. Before the project I knew nothing about raising indigenous chickens commercially. In fact, it had never even occurred to me that indigenous chickens could be raised commercially. Before RIU, I raised 5 to 10 chickens for my own household consumption. After the RIU intervention, I began keeping 100 indigenous chickens commercially. Through RIU, I discovered that indigenous chickens are not only marketable but are preferred by customers and therefore fetch a better price in the market. When I realised the advantages, I started raising them in phases so I would always have stock to sell. I sell them at a wholesale basis and that way I am able to plan expenses and see the profits more clearly.

It is because of the indigenous poultry business that I can afford to pay school fees for my children, which I have not been able to afford in the past. My children had been home for a long time because I could not afford the school fees. Now, one of my children has completed a certificate course in community development and is now in college pursuing a diploma in the same field. My other son is studying in a private boarding school. All of this is possible because of the profit I make from my business selling indigenous chickens. After learning from RIU how to keep indigenous chicken commercially my life and that of my family has improved.

The way RIU conducts the trainings is the reason for the project's success. I must be honest, that at first receiving 100 chickens was shocking. I did not know what to do with them but RIU held my hand all the way and brought household trainers to stay with me for 30 days. The trainers taught me how to manage day old chicks, how to maintain the right temperature in the brooders, how and what to feed the chickens, how to vaccinate and even check for symptoms of common poultry diseases.

The hands-on on-site approach to training is the reason for my success. If I had learnt this in a theoretical classroom environment the results would have been entirely different. I wouldn't have remembered how to apply the lessons learnt in the classroom once I got the chicks. Having the trainer guide me through the process, step by step, made all the difference. I learnt through action and the right knowledge was given at the right time. Having trainers staying in the villages helped to dispel a lot of the anxiety that I faced. Each time I had a problem, I knew who to go to and I was less worried because I knew they were at my disposal.

RIU gave us interest free loans in form of inputs i.e. feeds for one month, drugs, chicks, vaccines. I understood that I had an investment to protect and that motivated me immensely. I realised that if this venture worked then it would mean a lot for me and my family. I built a shed for the chickens and learnt that I had many resources at my disposal within my environment. Throughout my learning RIU empowered and motivated me to strive for more.

I soon found out that I was also a role model for my community. When my neighbours saw the progress I had made raising indigenous chickens they were easily convinced to join the RIU programme because the results spoke for themselves.

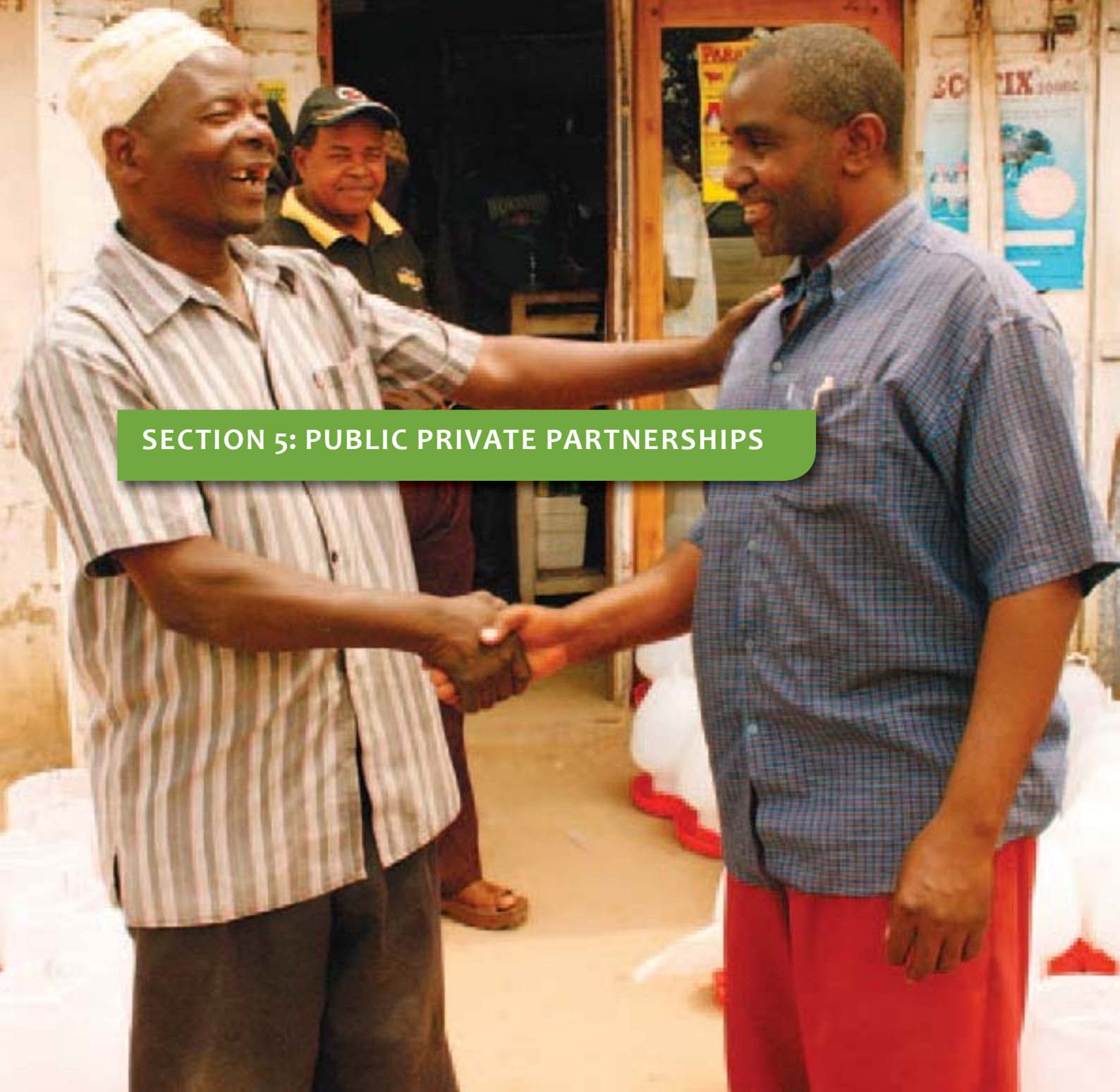
I now keep a total of 300 chickens, which I raise in rotation. Every four months I sell between 170 and 180 chickens at 5,000 TSH (USD 3.40) each to KukuDeal, who then distributes them to hotels, retailers and other customers. Every time I sell off my chickens I remain with 20 to 30 chickens that I keep for my personal consumption of which I give some as gifts to family and friends. We also replace the 200 chickens we just sold and shift the remaining 100 to the larger shed to be the next in line to be sold. So the whole business is based on constant rotation of stock.

I feel that I have truly embraced the spirit of entrepreneurship and I can see the opportunities available to me within the indigenous chicken industry. For example, right now my chickens don't have enough space in their current shed and they do not have a protected enclosure to run around in. I hope to build new sheds in the near future so that the chickens can run freely and safely. This expansion is important for me because I want to expand my flock to 500 chickens by the end of this year and continue to expand every year.

It is common practice for governments, NGOs and community projects to claim that they are bringing transformation and development to the people they say they are serving. It is easy to speak about their successes in the media, through newspapers, radio and TV. Just because they advertise their 'success' it doesn't mean that their projects really reached the target audience. For those projects I want them to learn from the RIU project. The RIU project can teach them that giving interest free inputs loans directly to farmers is the way forward. The way forward is in helping poultry farmers learn through action. The way forward is teaching and showing people that indigenous chickens are a viable business. This is why I can say with 100% confidence that with the right projects, such as demonstrated with RIU, it is possible to tackle poverty in Tanzania.

LA PEMBEJEO ZA KILIMO NA MIFUGU

## SECTION 5: PUBLIC PRIVATE PARTNERSHIPS



## 5.1 PUBLIC PRIVATE PARTNERSHIP STIMULATES COMMERCIAL FARMING OF INDIGENOUS CHICKEN IN TANZANIA - A CASE OF CHAMWINO DISTRICT DODOMA

Agustino Kibaya,

Principal Livestock Field Officer and District Project Coordinator - Chamwino District Council

*‘When there is good cooperation between the private and public sector, quick gains and sustainable impact can be realised. This has been evident in Chamwino District, Dodoma region. Public private partnership is delivering positive results in commercialization of indigenous chicken’*

Public Private Partnership (PPP) is an idle resource that can facilitate the delivery of tangible results in terms of poverty alleviation. This happens if efforts are directed to create purposeful partnerships between the Government and the private sector. Chamwino District Council has taken an active role in cooperating with the private sector through the Research Into Use (RIU) project and is creating tangible business opportunities for small scale poultry farmers.

RIU connected important players in the indigenous poultry industry from hatchery owners; veterinary product suppliers; poultry feeds producers; small scale poultry farmers and the district council. The stakeholders were brought together to unveil solutions to bottlenecks that hinder commercialisation in the indigenous poultry industry. Chamwino District council shared interest with the private sector in transforming the lives of small scale poultry farmers and this has driven the success of the project.

Our involvement ensured that the private suppliers provided poultry farmers with quality services and products by promoting compliance to Government regulations and quality standards in the sector. On the other hand it built more confidence in the market in terms of the quality of chicken sold by the small scale poultry farmers. We also collaborated in assisting RIU to distribute inputs such as chicks, vaccines, drugs and feeds from private suppliers to rural farmers. The Council deployed extension workers to provide advisory services to poultry farmers. This included advisory services on managing day old chicks, vaccination, early detection of diseases and treatment. This arrangement developed organically without any contractual agreement.

In Chamwino, the RIU programme started less than a year ago and already the results of this joint effort is becoming evident. More indigenous poultry farmers want to join the project. In a period of five months the number of indigenous poultry producers has more than doubled from 130 to 390. The District has also seen an increase in demand for supporting services such as drugs and feeds on a commercial basis. This has prompted the District Council to include the subsector in its priorities. Plans are underway to include the sector in the Council budget, which will enable the Council to ensure sufficient support to the sector to compliment the private sector efforts.

The interaction has also brought new insight in other poultry projects which have operated in the District but with little success. The RIU model of engaging multiple stakeholders and ensuring individual ownership of poultry enterprises by farmers has challenged the Local Government thinking. RIU programme has also been promoting the use of inputs that are locally available in order to improve poultry keeping. As a result, technology uptake is very affordable and practical to poultry farmers. There is a discussion to implement the existing Council project funding using RIU’s approach.

The partnership with private sector is important because it challenges Government practices and institutional culture. Even though it is early in the programme, the RIU experience has created exciting prospects for people of Chamwino District. The Government sees the value of this project and endeavour to continue supporting RIU. This is because in the few months that it has operated we have seen the benefits it has created and the way it has transformed subsistence poultry farmers into profit making entrepreneurs.

The key to the public private partnership success in Chamwino is that, it was an opportunity and a juncture where creativity, shared interest, commitment and good communication met. RIUs' efforts of linking stakeholders and opening communication between different stakeholders triggered this cooperation. The responsiveness of poultry farmers to the initiative stimulated Government's interest to channel our resources to support this endeavour. The focus of the partnership was to genuinely address challenges with practical solutions. RIU's role as an innovation broker smoothed relations between stakeholders and facilitated the growing demand for the project to continue.

There are numerous challenges that have yet to be addressed. The Chamwino Council has very few workers who currently cannot meet the growing demand from the farmers for extension services. The Government has had to deploy some of the retired extension workers to meet the demand. The private sector can help to fill this gap. The Chamwino District lacks a poultry inputs supplier on site and therefore most supplies are purchased outside the District. Furthermore, the Council lacks sufficient funds and vehicles to cover the entire District and the council has to rely on funding from other Council programs to cover the costs of supporting poultry farmers.

It is becoming evident to the Government that Public Private Partnership can actually work and make a positive difference in the communities that we serve. Sustaining relations with actors such as RIU and exploring new avenues for cooperation can stimulate further economic growth. The obstacles that threaten to reverse the gains realised from the RIU programme must be tackled so that the progress we have made is sustained and extended to reach more poultry farmers.



## SECTION 6: INPUT SUPPLY



## 6.1 INCUBATING INNOVATION: INDIGENOUS CHICKEN HATCHERY OWNERS EMERGE AS KEY PLAYERS IN THE POULTRY SECTOR

*Festo Balegele*

*Indigenous Chicken Hatchery Owner*

In 1997 my chicken flock increased to about 50 hens. I became frustrated by the way the hens were unable to cope with a larger number of their eggs. They were fighting for the nests and in the process breaking almost all the eggs. I bought what I then thought was a big incubator, with the capacity to incubate 576 eggs and a hatching capacity of 192 eggs. Whenever I wanted to rear chicks, I would incubate the eggs, usually about two to three times a year. In between, I was selling the fertilized eggs as table eggs to nearby shopkeepers. My hatchery was a domestic appliance that I used very much like the way fridges are used in homes. I never thought that my incubator could one day be used to produce indigenous chicks for selling to other poultry farmers.

Before 2009, poultry farmers in and around Dar es Salaam were only involved with keeping exotic breeds, namely broiler and layer chickens. Change came when I read an advertisement in *Nipashe*, a local Kiswahili daily newspaper. A company I had never heard of, MUVEK Development Solutions Tanzania Ltd., under a programme called Research Into Use was calling a meeting of producers of day old indigenous chicks. I attended this meeting and it transformed the way I used the incubator. I changed from a domestic Hatcher to a medium commercial supplier of day old chicks.

Once I joined the RIU programme as a chicks supplier, I met local organizers of smallholder farmers in Rufiji, Kisarawe, Kibaha and Bagamoyo Districts, who were called “champions”. The champions mobilized several farmers to rear indigenous chickens commercially. However, farmers, who were willing to participate, faced the challenge of chicks supply. I learnt from the RIU Programme Coordinator about an efficient supply and payment system that was already put in place by the programme and I immediately saw a business opportunity in the programme.

6

Input Supply



*A sample incubator in one of RIU supported indigenous chicken hatcheries. RIU Supported five hatcheries with loans for purchase of larger hatching machines, expanding and improving parent stock as well as building infrastructure. As a result production capacity in hatcheries has increased from 500-2000 chicks per week to 6,500-10,000 chicks per week.*

6.1

Input Supply

The high demand of day old indigenous chicks through the RIU programme encouraged me to expand my hatchery both in terms of parent stock and the use of incubator. I increased my incubation capacity to 54,000 eggs by buying four incubators with a capacity of 13,500 each. Although I have not fully utilized this capacity to date, I have put into action a plan to increase parent breeder flock size so that in the near future, the incubation capacity is fully utilised.

The plan of fully utilising the incubation capacity presently available, involves using other small to medium scale poultry farmers (out-growers) who I have entered into agreements for production and supply of fertilized eggs for my hatchery. I am currently working with five out-growers. Four are located in and around Dar es Salaam and the fifth is in Mbeya Region, approximately 1000 km from Dar es Salaam.

Currently I produce more than 2,000 chicks per week. 30 percent of the eggs come from my own breeders while the other 70 percent comes from my out-growers. Although I do not have formal contracts with the out-growers, they have agreed to sell all their fertilized eggs to me. I pay them TSh 300 per egg.

Commercialization of the indigenous poultry industry through several small and medium players comes with a lot of challenges. Chicks have to be stronger, and of higher quality to withstand the long distances they have to travel before reaching their final destinations. The quality of chicks is a direct reflection of the management of both our poultry farms and our hatcheries. In order to meet the higher standards the

business as usual attitude that I had practised for the past 10 years had to change. Better and scientific methods to ensure bio security had to be learned and instituted. For this to take place, experts in the field of poultry farming and incubation, who are very few indeed, had to be sourced and contracted to train us on vaccinations and acceptable hygiene levels. The poultry farm and hatchery management system had to undergo improvements. Together with 12 other hatchery owners, I received training, as part of the transformation through RIU. The 13 hatcheries are now producing about 7,500 chicks per week. We sell chicks to the RIU Programme which in turn supplies them to smallholder contract farmers in the regions as the RIU Programme has good linkages with them through the network of district champions.

KukuDeal is now taking over this coordination role from RIU and we hope they will continue buying our chicks after the RIU Programme ends.

The demand and supply of day old indigenous chicks created by the RIU made the Government, for the very first time, take notice of the existence and importance of poultry farms and hatcheries producing indigenous chicks. These enterprises are owned and managed by local farmers. Officials from the Ministry of Livestock Development, in a meeting organised by the RIU, informed the poultry farmers and hatchery fraternity in the RIU Programme that all parent stock farms and hatcheries have to be registered by the Government. Initially we were all overjoyed! Recognition from the Government means a great deal. However, our enthusiasm was short lived as the Government introduced stringent Regulations that we are unable to meet. We therefore were not registered. The biggest obstacle in the Regulations is the site and design of hatchery or breeder farm whereby it is specified that it has to be *“located one kilometre radius for hatchery and five kilometres for a breeder flock away from other buildings housing livestock and poultry in particular”*. The land appropriate for setting a breeder farm and hatchery business has got to have adequate clean and safe water. In addition, the availability of power is essential. Since most of our hatcheries were established before the Regulation was in place they do not meet the above stated requirement. Lands that can meet the stated requirement are in rural areas where availability of clean and safe water, electricity and other essential services for running the hatchery effectively is absent. Even existing commercial exotic poultry farms and hatcheries could not meet the new requirements. In addition, the type of stated land is of such prime value for a small to medium local entrepreneur to acquire that the intervention of the Tanzania Government is required.

The advantage of working together under the umbrella of RIU gave us the power of numbers. We have adopted a strategy of engaging the Government instead of confronting it, through the Ministry of Livestock Development, to help us acquire land for our poultry farms and hatcheries. Good relations that exist between the Government, indigenous poultry farmers and hatchery owners has come around as a result of the RIU Programme working as an innovation broker. Despite very stringent conditions set out by the Government in the registration process of breeder farms and hatcheries, local hatchery owners and the Government continue the dialogue to reach constructive alternatives.

The RIU Programme in Tanzania has enhanced our confidence. We, the indigenous chicken farmers, are now taking the lead in organising all chicken breeders and hatcheries, including the exotic poultry farms. The aim is to create a strong organization representing the poultry sector and engage in dialogue with the Government.

This new found confidence has gone a long way in making farmers and hatchery owners create new ways of improving businesses so that they are more profitable. We have sat down as a team and looked into ways of improving the quality of our breeder flocks while making the whole business more profitable. With the increased scale of production, the need for improved feeds emerged for local breeders, which was not available at the time. Together with RIU and KukuDeal, we are looking into ways of getting appropriate and affordable feeds. This will go a long way in increasing the eggs laid per hen and improve hatching rates.

Before, such plans and programs were unthinkable for the small and medium indigenous poultry farmer or hatchery owner. A member of our hatchery fraternity is now producing improved chicken feed for himself and 12 other hatchers and the out-growers who are producing eggs for me.

Personally, it was and still is more than just a business opportunity. I consider myself a social entrepreneur and have inner satisfaction that I can make money while doing business with local farmers. This is a very rare opportunity in this part of the world, where we are often bombarded with ideas that our poverty and conditions are beyond our control and that we do not have the ability to overcome it. Normally it is the rural farmer selling her/his produce to urban business brokers at a very low price and the urban broker selling the produce with a big profit in urban markets. But now the situation goes both ways. With the RIU approach, everyone wins.

The chicken industry previously dominated by large foreign-owned hatcheries, catering only for exotic breeds, was suddenly opening doors to indigenous small and medium farmers producing indigenous breeds that can be raised in every corner of our country, by people of all walks of life, women, men, retirees, the physically handicapped, youths etc.

For the first time, opportunities were being created for the small and medium local farmer to start a breeder flock without importing parent stocks from outside the country. And better still, the demand of day old chicks has been increasing exponentially. The indigenous chicken hatchery owner is now a key player in the poultry sector in the country.

## 6.2 THE HIDDEN BUSINESS OPPORTUNITY FOR VETERINARY DRUG SUPPLIERS IN TANZANIA



*Dr. Charles Mgaya*

*Manager of Animal Health Division, Bytrade Tanzania Ltd*

My name is Dr. Charles E. Mgaya. I am a veterinarian by profession. I have been working with Bytrade Tanzania Ltd., an agro-inputs supplier for the past 10 years. Before joining Bytrade I worked with the Ministry of Livestock Development and Fisheries for 27 years. Through working with Bytrade I have gained experience in importation and distribution procedures of veterinary drugs to stockists. I am involved in training farmers on good husbandry practices, drug administration, bio-security and other disease control measures. I am currently the only veterinarian representing Bytrade Company in dealing with poultry drugs in the country.

Since 2009, I have been representing Bytrade in the Research Into Use (RIU) poultry project. Through this relationship, for the first time, our company started supplying poultry drugs to rural chicken farmers in Coastal region. It all began when we had an informal meeting and dialogue between RIU and Bytrade Directors during the Participatory Agricultural Support Sector board meeting (PASS). This was followed by negotiation of terms for collaboration and by late 2009, it all began, I received the first order of antibiotics and multi-vitamins from RIU.

From day one, I was personally confident that RIU was using the right approach of commercializing indigenous chicken production. My Directors, on the other hand, could not understand the concept quickly, but eventually concurred with me after they saw drug orders from RIU and RIU farmers increasing steadily day after day.

The poultry drug business in Tanzania includes drug importers and distributors who supply local stockists that serve farmers directly. A major part of the veterinary drug business, around 85%, comes from larger animals, such as cattle, sheep and goats. Exotic commercial poultry (broilers and layers) represent about 10% of business and the remaining 5% is for domestic pets.

Until recently we had never considered supplying drugs for indigenous chicken as a viable business opportunity for our company. Mostly because there was no clear value chain established that presented interesting economic potential. This began to change in 2009 when RIU Tanzania started commercializing the indigenous chicken industry. Through their interventions they increased the numbers of chicks kept per household. This commercialization involved rural farmers who were given a loan of 100-300 day old chicks and other essential inputs. Farmers were supposed to rear them for four months before selling them with an “all-in, all-out” principle (meaning that all chicks were raised and sold at one time to make room for the next batch of chicks). This approach raised the demand of disease control and treatment, feed supply and chicks supply.

In the beginning in Bytrade we thought we had the ability to supply and distribute sufficient quantities to the new emerging markets of local poultry farmers. As the days went by we realized that our distribution network was not well connected to the villages to satisfy their demand for drugs. Our network only reached stockists as far as Regional and District towns. This is a traditional attitude of drug importers, to work with stockists and not directly with farmers.

In order to address this challenge we had to try and change our operational arrangements and drug ordering style to meet the new market demands which increased by 25%. One of the initial changes was my appointment to work directly on poultry issues. We then selected stockists at the District level. We however could only select a few because we could not get reliable stockists in the District towns who could act as our sales outlet and distributor to poultry farmers.

In order to solve this bottleneck, we tried to go around with a van, organising trainings and demonstrations on drug use and at the same time selling drugs to farmers. We made training arrangements with District champions in Coast Region and managed to conduct five training sessions in Rufiji, six in Kibaha and two in Mkuranga District. The sessions were conducted at Ward level with farmers residing in those Wards.

While the training was considered good and interesting it did not solve farmer’s immediate problems, which is local availability and constant supply of drugs. At that time, farmers had to either wait for the next visit by our van, which is not predictable, or travel long distances to stockists so they could buy drugs and vaccines. This is a challenge we are still struggling to address to date.

Another challenge was imposed by our product manufacturers. Manufacturer programs and production schemes are planned to serve large farmers in developed countries and not subsistence farmers of Africa. They could not agree to change the products packaging size because production costs on smaller packs is higher and poses a higher risk of adulteration. Large packs of 100g, 500g and 1kg were available in the market but smaller packs of 50g and 30g for powders and 50mls and 30mls for liquids were not available to accommodate smallholder farmer’s requirements.

These sizes did not fit with small farmers who had only 100 chicks and grew gradually, to 200, 300 and even 500 chicks. Logically, these farm sizes call for use of smaller product packaging sizes. You don't sell a farmer a 1kg pack of drug because there is a chance the medicine will expire before they can use it. Thus poor farmers and the RIU programme were forced to spend large unnecessary amounts of money for purchase of drugs.

One solution to this challenge could be for Bytrade and other importers to establish temporary re-packaging factories. This calls for rescheduling of importers plans, capital investment, technology upgrade, more personnel and more recurrent expenditure. But importers are not ready for this because they believe that the problem is temporary as small farmers are expected to grow into medium and larger scale in a few years.

Another core problem was with the distribution of drugs and vaccines to farmers in villages. We can try and solve the problem with RIU/KukuDeal if they are willing to help facilitate the formation of indigenous poultry societies at the Ward level. These societies can later on act as agents of regional and district suppliers. In the meanwhile, an interim solution will be for Bytrade & RIU/KukuDeal to select one trustworthy stockist at District level to be the distributor in the whole District. This stockist should also be voted in by the farmers to avoid conflicts. We have experienced conflicts between farmers and stockists before. In order for these stockists to get supplies from Bytrade on consignment basis, RIU/KukuDeal can guarantee the stockist on payment to Bytrade. This was previously done where RIU provided official letters of guarantee for district suppliers to Bytrade. This system will work better with RIU/KukuDeal poultry societies if we invested in them.

Societies themselves are interested parties in the innovation and in case they fail to pay, the said amount it can be deducted directly by RIU/KukuDeal from their chicken sales. Therefore, the option of a local chicken society being drug/vaccine agents is the best option. On the question of constant drugs/vaccines supply, we will continue to liaise with RIU/KukuDeal to get the required quarter requirement and forward them to manufacturers for the planning of their production. This will prevent us from being out of stock when they need to be supplied, which occurs from time to time.

Another obstacle encountered is the literacy level of farmers. Most farmers in villages cannot read and write. This means the proper use of drugs and vaccines is not always certain. In order to solve this RIU has placed veterinary certificate holders in every village, who are taken care of by farmers themselves as their contribution. Bytrade from time to time visits and trains both extension workers and farmers on drug use and management.

Currently, there is only one person (myself) from Bytrade working with poultry and the volume of work for field trainings is more than we can handle. This calls for better organization by Bytrade if we want to keep up with the expansion of the poultry subsector.

RIU has helped us and other stakeholders to realize new business opportunities. Bytrade came to know so many other stakeholders which we did not have contacts with before. Some of the new ones include contacts with feed manufacturers, hatcheries, local poultry farmers (core customers), extension workers, different facilitators and donors. Most important, RIU created new business opportunities for us and other stakeholders. Besides drug supply we were able to start a few new businesses, doing business in supply of enzymes, acidifiers and premixes with feed manufacturers and disinfectant supplies to hatcheries and farmers. Our sales on poultry products have doubled and in other areas, such as vitamin sales, it has tripled.

To conclude, RIU has been our eye opener to dormant potential in the indigenous chicken industry and we are thankful to the RIU team for the opportunity. In my experience working closely with RIU, implementing interventions at farmer level, I would like to suggest that the RIU programme working with indigenous chickens continue for another two years to strengthen what they have started and to scale up to other regions of Tanzania. It will give a chance to villagers to reduce the levels of poverty as it has happened with farmers in Coast Region. Other stakeholders need RIU to continue with the linkages and advice provided through the programme so that they can stand on their own when the programme ends.

In general, RIU opened a hidden business opportunity for us and other stakeholders. This business has increased our income through sales and now our products are known everywhere the RIU project has operated. If I am asked about the future and sustainable poultry value chains, I would say we should first solve the distribution issues. We should think of quickly organising farmer's societies at Ward level which can later put up an input shop run by farmers themselves under the supervision of a qualified advisor and the village extension worker if available. Bytrade understands that education to farmers on disease control; treatment and husbandry are important ingredients towards success of poultry farming.

## SECTION 7: FINANCING SMALLSCALE RURAL PRODUCERS



## 7.1 POULTRY CONTRACT FARMING: FROM PROJECT TO BUSINESS



*Dennis Mbangulla*

*Project Officer, Innovation – RIU Tanzania*

RIU initiated poultry contract farming in 2010. The contract farming model was started to address a number of challenges and lessons collected during the first round of commercialising indigenous poultry production. As farmers finished their first production of 100 chickens, they were not able to immediately start a new cycle as it was previously assumed. This was due to problems in access of capital to invest in a new production cycle. Most farmers sold their first flock in retail and they immediately used the money to cover household needs. Thus by the time they finished selling all their chickens they also had no capital left or saved to invest in a new cycle. At the same time, farmers were not able to access loans from financial and credit institutions since they couldn't meet credit conditions defined by the institutions. Despite the lack of capital most farmers were eager to continue producing chickens as well as expand their enterprises to 200-500 chickens.

On the other hand, input suppliers (hatcheries, feed producers, and vaccine and drugs suppliers) who were stimulated to increase their production capacity needed stable markets in order to survive as well as to recover their investments. The low purchasing power of farmers meant that these newly established and/or expanded enterprises were at risk of collapsing. With no volumes of chickens from farmers, market and marketing systems development was also very difficult. The market required large and constant volumes of chickens every week in order to run efficiently and profitably. This meant that farmers had to produce consistently every three to four months throughout the year.

These challenges prompted RIU to design a contract farming system as a solution for availability of credit to farmers; assuring markets to inputs suppliers; developing the market and marketing infrastructure for outputs; enhance uptake of new knowledge and technologies; and consequently stabilise the emerging indigenous chicken industry. By implementing the contract farming model, RIU also intended to increase the contribution of smallholder producers in the poultry subsector.

It was however a big challenge to ensure continuation of this initiative as well as drive the indigenous poultry industry growth after RIU phases out in June 2011. A business initiative – KukuDeal – was therefore created at the same time to operate the contract farming model and take up RIU's role of stimulating and organising the indigenous poultry value chain as well as activities required to drive its growth and expansion. KukuDeal took up the role of handling the multiple of relationships within the industry because the industry was not yet fully organised and independent. Moreover smallholder farmers who were the main producers had not gained enough capacity to deal with a wide range of suppliers in urban areas.

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## THE MODEL

The contract farming arrangement started with farmers who had already kept the first cycle of 100 chickens. Terms and conditions for contracts were negotiated by RIU and farmers prior to instituting them. Contracts were drawn by RIU considering lessons obtained from the first cycle. In all areas, RIU organised a meeting with farmers and introduced them to the concept of poultry contract farming. Suggestions and adjustments to contracts were proposed and made. At the end of each meeting farmers champions were left with copies of contracts to distribute to interested farmers. Farmers were given time (about a week) to decide whether they would like to enroll or not. Farmers who could not read and write were assisted with their children or grandchildren, or whomever they trusted. Interested farmers filled up contracts and submitted to their champions who then submitted them to RIU. As a prerequisite for entering into a contract, each interested farmer was required to expand their chicken shed and have enough drinkers and feeders, and open a bank account as their commitment to the business. During the signing process, RIU found out that some farmers especially women and the elderly had special needs, and these were immediately addressed by making the necessary adjustments in their individual contracts.

Under the contract each farmer received a loan worth Tsh 450,000. The loan was given in terms of inputs i.e. 200 day old chicks, vaccines, drugs, and feeds required for the first month. The decision to issue inputs loans rather than cash loans was made to eliminate the risk of farmers diverting the loan to other uses. In addition to inputs, farmers were provided with advisory services through poultry household advisors and they received entrepreneurship and business training during their second month of production. These services were paid for by RIU and farmers were not required to reimburse them. The major aim for providing these services for free was to reduce and mitigate the risks associated with managing chickens, as well as to enable farmers to run their business profitably. For instance, poultry household advisors played an important role in providing support services to farmers. Having them for the entire production period ensured that farmers raised their flocks to meet market requirements such as weight and health; and mortality rates were reduced through timely disease control and management.

Through the contract, farmers were also provided with a reliable wholesale market. At the fourth month farmers sold about 75% of their chickens that had reached between 1.3kg to 1.5kg to KukuDeal. 25% was left with farmers for household consumption. Chickens that reached the required weight were bought at TSH 5,000/-. All chickens were collected from rural areas and delivered to a designated holding ground which was openly accessible to all traders and consumers. After collection KukuDeal sold chickens to urban traders and consumers at TSH 5,500/- for live chicken and TSH 6,000/- for dressed chicken. The margin i.e. TSH 500/- was used as operational costs for KukuDeal. It was imagined that later on as the contract model expand, this margin will be used as investment to expand the model to reach more rural producers. KukuDeal acted as a link between traders and farmers to ensure that the loan given to each farmer was recovered and reinvested into the same or new farmers. Within seven days after collection of chickens farmers' loans were deducted from the sales and they were paid their profit through their newly acquired bank accounts.

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## BENEFITS OF THE CONTRACT SYSTEM

The KukuDeal contract farming model largely increased farmers' profit margins by providing them direct wholesale markets. Before the RIU poultry commercialisation project farmers were able to sell their chickens to traders for TSH 3,500/-. Moreover they could not access wholesale markets. Accessing wholesale markets meant that farmers were able to receive lump sum payments which they invested in improving their sheds, expanding the flock size, improving their housing and covering basic household needs as well as meeting other financial obligations such as paying for school fees.



Farmers in Bungu Ward, Rufiji district signing their first contracts for poultry keeping. Poultry contract farming created major advantages for farmers specifically women. The financial mechanisms provided through contract farming enabled vulnerable groups to easily access inputs, markets and reduce the levels of risks in the value chain.

The arrangement also increased farmers' ability to use new services. Most farmers opened bank accounts for the first time since their payments had to be made through a bank transfer rather than by cash. This helped to safeguard their money and also gave them an opportunity save and decide how the money is spent in the family.

Through contract farming farmers were able to consistently raise the required quantity and quality of chickens. This was instrumental in building up the market as well as relationships with traders and urban buyers. Previously smallholder farmers were unable to partner with such traders due to their inability to meet the market demands. Improving and increasing production has enabled farmers to significantly take part in the poultry subsector. This has transformed farmers from being participants to being partners in the system and along the value chain. Farmers now know that they are important stakeholders in the value chain and this has given them confidence as entrepreneurs. Mr. Mwaipopo, a farmer from Kibaha district declared that

*"...I feel good that my chickens have entered big markets through KukuDeal contract farming. I know if I was out of the contract I wouldn't have reached that market. I will continue to enter into contract farming with KukuDeal as I am assured of a reliable market and growth".*

Contract farming has also changed the relationship dynamics in the industry. Input suppliers are more willing to serve smallholder farmers because of the increased purchasing capacity through contracts. Chicks suppliers such as Mr. Balegele are now viewing smallholders as their main clientele and they are constantly trying to improve the quality of chicks to ensure farmers continue to remain in the business. Large input suppliers, like Bytrade, have now started working with small farmers by providing inputs, and technical guidance on the use of vaccines, drugs and disease diagnosis. Bytrade now visits small farmers in the villages and capitalise on the growing understanding that small indigenous farmers are their potential business partners. Dr. Charles Mgaya a Vet Doctor with Bytrade affirmed that

*"There are two issues that I am seeing here: one is that, contract farming assures Bytrade of sustainability of our business i.e. supplying large volumes of inputs to farmers through KukuDeal. The second is that as a Vet Expert it has given me a new experience of working with small farmers in the villages, training and giving them advice on poultry drug use and poultry management. I have never dealt with small scale farmers before, so this has been a new experience".*

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## OBSTACLES

Contract farming started in 2010. During its implementation a number of challenges emerged. The main one however, was the poor ability of some farmers to buy chicken feeds after the first month, i.e. after feeds given through the contract ran out. Farmers were supposed to source own feeds after the first month. This was a big challenge that resulted to a significant number of poorly fed chickens with stunted growth, lower immunity and prone to malnutrition related diseases. This challenge led RIU and KukuDeal to introduce a support system where farmers were loaned feeds for the entire production cycle.

Another challenge was high prices and very poor quality of poultry feeds. This challenge still exists to date. When feed suppliers saw that the demand for feeds grew, they increased feed prices while the quality remained poor or even dropped. This frustrated both farmers and KukuDeal. KukuDeal worked with experts and selected feed producers to come up with cheaper feed formulae while maintaining quality. Seeking solutions to feed problems was key to KukuDeal in order to reduce chicken mortality and to ensure that farmers raise healthy birds that can compete in the market.

Absence of characterised indigenous chicken breeds identified for meat and egg production was another big challenge that faced the industry. Since indigenous chickens are not characterised, the genotypes are too diverse and difficult to choose and standardise management. Sometimes this discouraged farmers as some chickens gained weight better than others. This meant some of them took a longer cycle than others before entering the market. The programme together with hatcheries tried to manage parent stock by continuously eliminating weaker ecotypes to ensure that hatcheries remain with the best possible types that can gain weight better. At the same time RIU requested the National Livestock Research Institute in Mpwapwa to characterise the local breeds and come up with at least two lines that are suitable for the business and consumers.

The reluctance of large input suppliers like Bytrade to open outlets or enter into contracts with village stockists to sell their products was yet another challenge. Farmers in the villages were entering into contracts in large numbers and more services were demanded in their localities. Unfortunately, large input suppliers were reluctant to give goods on credit to local stockists because of high risks of non-payment previously experienced by the companies. On the other hand local stockists could not access loans from financial and credit institutions due to tough conditions that they could not meet. This meant that farmers in the villages did not have reliable supply of inputs apart from those provided through the contract.

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## SUCCESS FACTORS AND LESSONS

The volume of chickens raised by farmers was the main factor that triggered innovation in the entire poultry value chain. The large numbers attracted other stakeholders to be part of the system and in so doing weaknesses and challenges emerged. Most stakeholders believed that the market for their products was the main problem, but when they were asked to supply to meet the new demand, they realised serious capacity gaps. Hatcheries, feed suppliers, drugs and vaccines suppliers alike were therefore challenged to expand their capacities and respond to the demands posed by the emerging sector.

Quote: “...We used to produce 1 to 2 tons per week for farmers in Singida, your first order of 18 tons gave us a shock, previously we thought we were able to meet any demand because of the machinery we have, only to realise that we cannot organize sufficient raw materials at once.” ~ Singida Feeds Supplier

For innovation to work out in a system where stakeholders are fragmented there must be someone or an agent who is willing to coordinate other stakeholders involved in the process. They must work tirelessly to provide linkages and lobby with policy makers to ensure that the chain is intact and it keeps moving value along the path. Such an actor has to be an innovation broker, a mercurial, dynamic and solution driven organ in the value chain.

Small farmers have demonstrated through this project that they are capable of doing big business, grow and participate in contributing to industry and the National GDP if systems that connect their businesses are well organized and risks that surround investment are reduced and shared.

Through contract farming we are now able to see that the chain is moving. Hatcheries are assured of markets for their volumes of chicks and they appreciate the role of small farmers in defining their business success. Input suppliers are now visiting farmers in the villages and they provide technical advice so that they perform well and continue with their poultry enterprises. Feed producers are coming up with new feed formulas that will not only make feeds more affordable for farmers but will also make their businesses profitable. Lastly, farmers who are the key stakeholders are now asking for larger numbers of chicks. They are confident in their ability to raise chickens and have been empowered to want to grow.

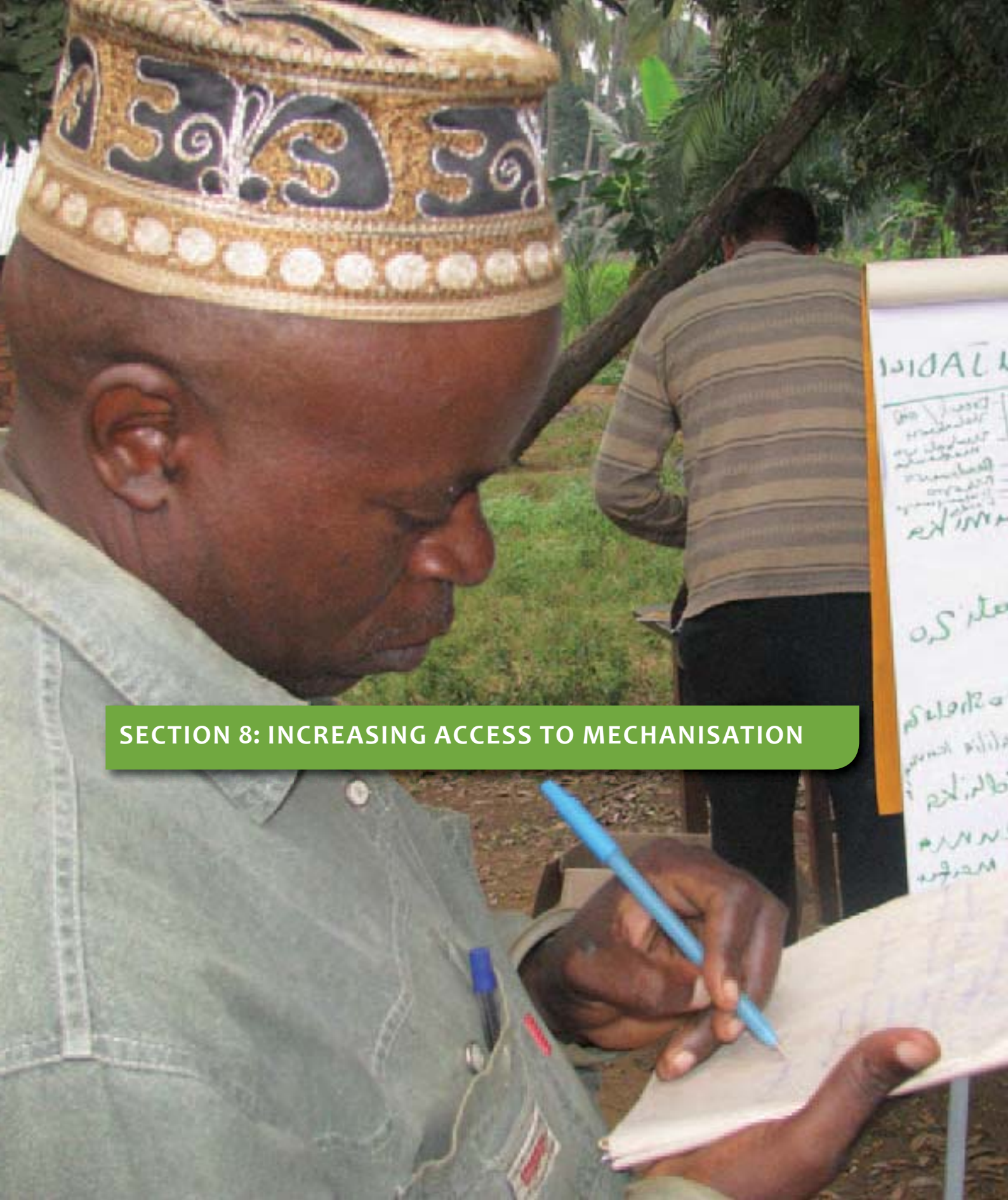
Although RIU has worked hard to nurture farmers to turn into relatively stable small-scale producers, there is still a lot to be done to take them to a level where they can sustain and operate their businesses independently. For farmers to become fully stable and independent it is crucial that risks that surround their businesses are managed. Risks such as the supply of quality feeds, drugs and vaccines as well as an assured market. This means organs that control quality of these items must be able to make sure that poor quality inputs are restricted from entering the value chain.

For the time being there should be an agent or a broker who will continue to nurture these farmers as they have not yet acquired enough skills and financial capital to run their business independently. An agent will be coordinating the supply chains, provide linkages with different stakeholders and with input suppliers who are mostly available in urban areas. Farmers still need to produce more cycles before they can become independent. This agent will have to operate as a semi public organization and should be flexible enough to absorb some of the risks at this stage.

Currently KukuDeal is operating under the umbrella of RIU with prospects of becoming an independent company (after RIU is closed) continuing to provide services that are provided by RIU but in a fully business manner so that it can fully sustain and grow to reach other areas as well.

For KukuDeal to run as a commercial entity it will need to come up with a viable and bankable business plan that can be presented to the government, donors, development banks, development partners, investors, etc. to seek for funding. KukuDeal can jointly set up a business deal with hatcheries and inputs suppliers as these are key stakeholders in the subsector. However, experience has proved that these businesses and companies are not ready to take risks associated with dealing with smallholder farmers and agro-dealers especially in rural areas. There are many risks in poultry farming, this is due to the nature of the business itself and where it is conducted, moreover, transaction costs are very high when working with rural producers. Therefore, unless they agree to work together on minimizing the risks and costs, they will not be able to rip the big business benefits. Thus the challenge is to change the mindset of big business entities from being only responsive to already created safe markets to also participating in stimulating markets for their products, taking more risks (i.e. facing rural challenges) and finding solutions.

This means the role played by KuKuDeal is very important in developing the subsector and therefore it has to be supported to exist.



## SECTION 8: INCREASING ACCESS TO MECHANISATION

## 8.1 BRIDGING SUPPLY AND DEMAND: A BRIGHT FUTURE FOR MOROGORO FARMERS THROUGH AGRICULTURAL MECHANISATION



*Felix Temu (left)*  
*District Subject Matter Specialists for*  
*Agricultural Mechanization, Mvomero*  
*District Council*



*Thabit Waziri (right)*  
*District Subject Matter Specialist for*  
*Agricultural Mechanization, Kilosa District*

Morogoro Region has a high potential for agriculture production in Tanzania with vast arable land for cultivation. Unfortunately, the land is underutilized because farming practices for most smallholder farmers in the region is characterized by the use of hand tools such as hoes, machetes, and slashes. The use of hand tools has led to poor agricultural productivity among farmers year after year. However, through RIU's approach, mechanisation platforms were formed in Morogoro region. Platforms brought together farmers and other stakeholder to analyse, identify and address challenges to underutilisation of land and low agricultural production among smallholder farmers. Through a "farm machinery hire model", there has been improved utilisation of farm machinery by smallholder farmers and smallholders have seen an increase in their production.

### THE CHALLENGE

Prior to introduction of the RIU Programme a lot of bottlenecks existed that hindered mechanisation of agricultural activities in Morogoro. In the process of addressing these bottlenecks RIU held two platform meetings with a variety of representatives in agro-mechanisation from four districts Mvomero, Kilosa, Kilombero and Ulanga Districts. Through these initial meetings key causes for underutilisation of agricultural land and low productivity of smallholder farmers were identified. These included low availability of labour; over dependence on labour intensive methods for agriculture production; and high costs of hiring mechanisation services. All of these limited farmers' ability to expand their areas of cultivation.

On the other hand, tractor owners did not service smallholder farmers because of poor organisation and small plots of land that were time consuming and too expensive to cultivate. For example, it is relatively expensive for a tractor owner to prepare individual smallholders' plots (mostly between 0.5 to 4 acres) because the costs of moving between two small farms located in different areas are too high. In addition, costs of tractor maintenance were too high because it was expensive to bring in mechanics from urban centres located many kilometres from the farmers. Most of the tractors in the districts were very old and in poor condition and needed close attention in terms of services. Besides the old tractors, other new tractors in the fields were of very low quality which resulted into frequent breakdowns, poor field performance and high maintenance costs. Spare parts were also not available locally and were very costly. All of these costs drove up mechanisation hire prices, thus making it impossible for smallholders to afford. Moreover, tractor owners could not guarantee good and reliable services to farmers and they had difficulties meeting farmers' demands. For instance, when a tractor broke down in the field in a remote area, tractor operators were not able to repair it quickly and continue with land preparation. This was a major constraint to farmers as the timing of land preparation and other activities is very important.

Other bottlenecks included a demand and supply deadlock between farmers and tractor owners. Tractor owners did not have enough customers to sell services to. At the same time their operating costs remained high, especially with increasing fuel prices. Smallholder farmers could not buy or operate tractors since the costs are too high. Access to credit from Banks and other financial institutions is limited as small holder farmers don't have the assets to put up as collateral for the loan. In addition, interest rates on commercial loans are too high for smallholders in the agriculture sector to afford. Another challenge is that, farmers had limited technical knowhow on the use of farm machinery and inputs such as fertilizers, improved seeds, pesticides or herbicides, consequently majority of smallholder farmers opted to manually prepare, cultivate and manage their small plots of land.

Furthermore, there was no enterprise offering tractor renting. Most tractor owners used their tractors for their own farms and were not serving other farmers or renting out tractors as a business. This was mainly caused by limited entrepreneurship skills among tractor owners as well as poor linkages between tractor owners and smallholder farmers. In addition, tractor owners did not see smallholders as their potential clients.

After the meetings, it was finally agreed that the way forward should focus on encouraging smallholders to mechanise their agricultural processes through hiring tractor services. Mechanisation of smallholder practices was seen as an opportunity for small-scale farmers to expand their areas of cultivation, use other improved inputs, improve post-harvest management and consequently increase their production.

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## BRIDGING DEMAND AND SUPPLY

To address the mentioned challenges, RIU started by breaking the demand and supply deadlock between farmers and tractor owners. This process was done in two steps. First farm machinery owners in all districts were identified by district mechanisation officers. Meetings were later held with RIU, tractor owners and district mechanisation officers. During the meetings we held open discussions on how to reduce the cost of tractor hire services and how to work with smallholder farmers. We worked with tractor owners to identify further problems that needed to be addressed. At the end of the meetings key ideas for easing the provision of services and increasing linkages with farmers were proposed. Tractor owners decided to form farm machinery owners groups in their districts and wards. This made them easily identifiable by farmers, spare parts suppliers, machinery dealers and regional and district authorities. Tractor owners also planned to use the groups as a supporting organ to solve their legal and other problems.

Tractor owners decided to start operating their machinery more profitably. We sat together with tractor owners and the RIU team and made tractor hire cost analyses and identified ways of reducing tractor hire services. This was a major step in helping tractor owners since most of them operated their activities without proper financial records and with a very limited clientele. After cost analyses were done, it was agreed that tractor owners have to reduce tractor hire services and they have to increase their customer base by working with smallholder farmers who were the majority in the villages. Tractor owners agreed that prices for tractor and machinery hire would go down if farmers were better organised into blocks; purchased services together; and increased their areas of cultivation. This will ease operations, maintenance, and reduce running costs. At the end of the meetings we produced price lists showing price reductions. The price list was used during our second step.

*Tractor owners and operators discussing price reductions for hire of mechanisation services to smallholder farmers during their first mobilisation meeting in Turiani, Morogoro.*



8.1

Increasing access to mechanisation

In the second step, tractor owners, mechanisation officers and RIU team held meetings with farmers at ward levels. Other stakeholders such as input suppliers and district extension staff were also present. In these meetings we discussed with farmers possibilities of increasing utilisation of mechanisation services. Open discussions were held and ideas were exchanged. Farmers were informed of the potential of mechanised farming and the use of appropriate inputs. Price lists developed during the first stage were used to show farmers price reductions. From the discussions farmers came up with several ideas to ease the acquisition of services and communication with tractor owners. They decided to form farmers' networks and to bundle their demands for inputs and services. It was therefore agreed that, farmers in each area would combine all their demands for mechanisation service hire, and hire a tractor from the union at a lower cost. Better organisation of farmers and tractor owners enabled the two groups to work together more efficiently and it improved access to mechanisation services among smallholders.

Using the cost analysis method, farmer groups and tractor owners groups are able to calculate and negotiate tractor hire prices. Prices differ depending on the type and size of land to be cultivated, with virgin land costing more than previously ploughed one. New flexibilities have also emerged. In cases where farmers have already bundled their tractor hire demands but are not able to pay in cash, they negotiate with tractor owners to either; (i) pay for services in terms of produce e.g. two bags of paddy or maize per acre after harvesting; or (ii) to acquire soft loans from fellow farmers and repay after harvest. This has been an important additional incentive for formation of farmer groups.

RIU and a vocational training college in Morogoro (VETA Morogoro) designed and carried out a training programme to address business and technical knowledge gaps among tractor owners and operators. Tractor owners and operators were trained on general management of tractors; appropriate management of tractors and their accessories as well as how to run and manage tractors hire service as a business.

Linked to the training was a support program to facilitate availability of quality maintenance services in the rural garages. The program linked rural garage owners with an experienced mechanic in Dar es Salaam to assist them in procuring quality parts and tools. About 28 million TSH was given in kind and as an interest free loan to the garage owners which was used to acquire basic tools needed when servicing tractors. The contact in Dar es Salaam received orders from the rural garages by phone; he did the purchasing then sent the parts in a bus to rural garage owners. Then money was paid through the mobile phone banking services with a commission. This system saved time and costs for rural mechanics to always travel to Dar es Salaam to make the purchases. At the same time, rural garage owners benefited from the expertise of their contact as well as his knowledge of good sources of quality parts. The contact provided garage owners with advice on new parts that have entered the urban markets.

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## OUTCOMES

Because of better organisation of farmers and tractor owners, and formation of groups, the demand for mechanization services has increased beyond supply. This goes hand in hand with the increase in area under cultivation and productivity among smallholders. For example in Kilosa District paddy productivity has increased from 1.9 tons per year 2008 to 2.2 tons year 2010.

In the year 2009 to 2010, 22 tractors were acquired through different credit institutions, such as Tanzania Investment Bank (TIB) and The Agriculture Input Trust Fund (AGITF) in Mvomero District. AGITF is a Government based financial institution that offers credit for acquiring farm machinery and inputs to farmers. The condition of accessing this loan is to have collateral of land or house with lease. For farmers' group to be able to access AGITF, they need to be registered and have a registration certificate. In addition, all application forms have to be approved by District Council of the applicants. The AGITF interest rate is 8 percent to be paid in 7 years time (against 15 to 20% for commercial loans). Some of the farmers' groups are in the process of registration so as to access loans and operate on commercial bases. Farmers have also increased their demand for other inputs like fertilizers, weedicides, seeds etc. This is because with access to ploughing services, more land was being cultivated and consequently more technology was needed to reduce the cost of weeding as well as quality of seeds were needed to ensure good returns to offset the cost of tractor hire. As a response to this, farmers were linked to different service providers for quality input services.

With RIU's approach of engaging a variety of stakeholders, such as input and agricultural machinery suppliers and extension workers, farmers slowly started changing their farming practices. There is now an increase in use of farm inputs and improved seeds.

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## TAKING THINGS FORWARD

Since RIU phased out its mechanisation project in 2009, coordination of activities in Morogoro region has been successfully taken over by the District authorities. District authorities did not immediately accept the responsibility of taking over activities. Our reluctance was based on past experiences with many other projects and programmes that have been implemented in the district without leading to significant changes. However after exposing district authorities to practical experiences of farmers and tractor owners, and seeing reports of improvement the reluctance was reversed and authorities gradually took ownership of the project.

Since then, Regional and District authorities have been using similar groups and systems formed through RIU for efficient implementation of **‘Kilimo Kwanza’** (Government programme prioritising agricultural sector development). The government also focuses on encouraging formation of Farm Service Centres through the private sector. In this regard, registered groups will be considered for credit to start Farm Service Centres. For example, the Kilosa Tractor Owners and Mechanics Group (UMAGE), which was created as a result of RIU’s interventions, is now fully registered and is providing mechanisation services. Currently it is in the process of accessing loans to start a Farming Service Centre.

District authorities in collaboration with the groups and extension staff have invited several machinery dealers (e.g. Farm Equipment, Savoy Farm, Noble Motors, Tractor Limited) to conduct trainings and demonstrations on the opportunities of mechanisation so as to create awareness among rural farmers. Recently, machinery demonstrations for the use of rice transplanter, power tillers and land scrapers was conducted at Dakawa Rice Farm by Farm Equipment Company and was attended by farmers, Regional and District authorities.

## SECTION 9: LESSONS LEARNED ON INSTITUTIONAL CHANGE

*The success of the Research Into Use programme hinged on its ability to stimulate institutional change and to learn lessons about how such changes can be stimulated and supported. The logic behind this is that the task of putting research into use concerns changing a cluster of habits, practices, rules, norms, routines and policies – i.e. institutions – that govern the effectiveness and direction of a wide range of processes associated with the way information and technology is demanded, created, transited, adapted and put into use (Andrew Adwera et al, 2011, forthcoming).*

The following institutional change domains will be discussed in this concluding chapter: New forms of financing rural innovation; Relevance for poverty reduction; Market-related institutional change; New types of organizations doing new types of roles; Old types of organizations doing new types of roles; New research practices; New network configuration; and Policy change.

### 9.1 NEW FORMS OF FINANCING RURAL INNOVATION

The way the activities in the chicken value chain were being financed, played a critical role in success of the development of the sector. The financing mechanisms provided through RIU, provided security and allowed several stakeholders to invest in their new businesses.

Through RIU, smallholder chicken producers accessed flexible and interest free loans to invest in chicks. In addition RIU subsidised feed for a month. The loans were to be paid back after the farmers sell their chickens. At the same time, RIU guaranteed to buy all chickens from farmers, thus securing their income. The advantage for producers of the all-in – all-out production system is that (i) they had a guaranteed market for their chicken and that (ii) they got access to relative large amounts of cash at the time of selling their chickens. This allowed them to pay back their loans, and to reinvest in a new production cycle (for which new input loans are provided) and to make a profit.

The guaranteed sales of chicken to RIU trigger the demand for one-day-old chicks, produced by the hatchery owners. Besides providing soft loans to hatchery owners to invest in increased hatching capacity, RIU bought all chicks from the hatcheries and sold them to farmers, proving hatchery owners with a guaranteed market.

The ways of financing described above, reduced the level of risks for farmers and other stakeholders in the value chain. As RIU took a position as financier as well as chain operator (buying and selling chicks, buying and selling chicken), it absorbed all risks in the value chain. In this way, RIU managed to kick start the sector on a commercial basis. An important issue is how this principle could be sustained after phasing out of RIU. In handing over activities to KukuDeal, a sound risk analysis needs to be done to make KukuDeal a viable business. How could the risk be spread over the stakeholders in the value chain?

Also in the mechanization, new financing arrangements were developed. First of all, by organising farmers and tractor owners, new price setting mechanisms were developed. In joint meetings, price calculations for different acreage are prepared as a basis for price negotiation. Tractor owners had transactions with individual farmers, but the fact that farmers were organised provided possibilities to smallholders to access mechanisation services on a credit base: they could either make an agreement with the tractor owner for payment at harvest or the group could provide a credit to the farmer, with his harvest as collateral.

## 9.2 RELEVANCE FOR POVERTY REDUCTION

Before 2008, the indigenous poultry sector in Tanzania was not very well organized with no significant commercial value and neither important to the government nor attractive for private sector investment. The number of chickens raised was very small and transactions in the sector were limited, informal and not recorded. RIU transformed the poultry sector to be a viable economic activity boosting local income for men and women and put in place business networks that included rather than excluded local small producers.

Up-scaling of the indigenous chicken production triggered the business sense in the poultry sector and hatcheries, drugs and feed suppliers started to respond to these new business opportunities. The poultry sector now offers income security for a range of stakeholders. Together with RIU support to innovation networks around mechanization which also allowed for increased production and productivity, the revival of the indigenous poultry sector contributed to poverty reduction in the rural areas. Indigenous chickens now contribute a more significant portion to household income in rural areas. Poultry keeper's income has increased and they are now able to afford school fees for their children and food for their families. One of the institutional factors in sustaining this new promising economic reality in the poultry sector is the increasing capacity of farmers to influence the business processes by engaging in partnerships and using their newly acquired negotiation and entrepreneurial skills. This will also help them to find their way out of poverty.



### 9.3 MARKET-RELATED INSTITUTIONAL CHANGE

The development of the indigenous chicken industry was possible because of the high demand for indigenous chickens in Tanzania and even surrounding countries. It was a major challenge for RIU to enable rural smallholders to become engaged in urban markets. Indigenous chickens have always been preferred by the majority of consumers. The market is still far from being saturated, so there is an enormous potential for the indigenous chicken industry to increase production. Without the consumer demand for indigenous chickens, the innovations in the value chain would not have been possible. The increased scale of production allowed smallholder producers to access the urban markets and to make local poultry production into a viable business and to develop the required support services.

RIU has made efforts to create demand on different levels in order to make the sector more market oriented. This led to an increased demand for chicken, and consequently for the input supply and services: eggs, chicks, feed, drug, advisory services etc. RIU could do so through the financing arrangements it established and by stepping in as a chain operator. These arrangements included price setting, contracting, providing financial services, among others.

### 9.4 NEW TYPES OF ORGANIZATIONS DOING NEW TYPES OF ROLES

In 2008, RIU was a new actor or organization in the poultry subsector, RIU has now demonstrated the importance of having an innovation broker equipped with resources and flexibility in the poultry value chain ready to solve different kinds of bottlenecks. All of this coupled with a political will to support and finance solutions needed to establish the infrastructure necessary to stimulate efficient private sector engagement in a particular sector or commodity chain. There is also still a weakness that needs to be dealt with: RIU is like a spider in a web, taking all the risks in funding and brokering. How dependable is the emerging poultry subsector with RIU as the only broker and funder?

Creating Indigenous poultry *farmer networks* allowed for better organized and more targeted service provision; focused training and capacity development based on expressed needs; and voicing of farmers' needs thus influencing the poultry subsector business.

*Hatcheries* for indigenous chicks existed before 2008 but only produced chicks at low quantities to satisfy mostly their own individual needs. They have now transformed into organisations dealing with huge chicks demands and managing large scale transportation networks in wider geographical areas.

The increase of actors in the poultry subsector and its commercialization has resulted in the Government engaging stakeholders to promote *poultry societies* that are organized enough to work with the Government to resolve the challenges of the subsector. Poultry stakeholders are underway to register the *Tanzania Breeders Association* and the *Tanzania Poultry Association*, these will all be established to lobby and defend the needs of stakeholders in the poultry value chain.

The establishment of local farmers' organisations and organisations of tractor owners has played an important catalysing function in agricultural mechanisation, leading to increased acreage and productivity. The organisation of farmers and the consequent bundling of farms led to a significant decrease in mechanisation costs. At the same time, the organisation of tractor owners led to improved and more reliable and timely service delivery. In addition, the organisation eased price negotiations (see also *New forms of financing rural innovation*).

## 9.5 OLD TYPES OF ORGANIZATIONS DOING NEW TYPES OF ROLES

The boost in the indigenous chicken industry required a revitalisation of the extension system in support of poultry farmers. As the number of small poultry farmers increased, so has the demand for more knowledge, but the number of extension officers at district level was too limited to deal with the increasing demand for agriculture advisory services. RIU engaged *poultry household advisors* to provide the necessary services under the umbrella of the extension officers; this enabled the advisors to reach out to more poultry farmers, staying with them for a longer period of time and satisfying their knowledge and capacity development demands.

Veterinary drugs stockists in the past mostly provided drugs for larger animals like cows and goats. With the poultry subsector picking up, stockists in district towns were selected by Bytrade to satisfy the increasing need for poultry drugs although only a few could be selected because of a lack of trustworthy, capable stockists who could act as sales outlet and distributor to the poultry farmers.

## 9.6 NEW RESEARCH PRACTICES

RIU has been collaborating with the National Livestock Research Institute. Unfortunately stakeholders from research were not able to attend the write-shop.

RIU has invested a lot in improving the utilization of existing knowledge by establishing relations between different stakeholders, revitalising and investing in household advisors, and by providing training to various stakeholders. The increased knowledge and skills of stakeholders is acknowledged to have played an important role in the innovation that led to the improvement of the sector as a whole.

## 9.6 POLICY CHANGE

Currently, chicken breeders and hatcheries are aiming to create a strong organization representing<sup>3</sup> the chicken sector and engage in policy development and dialogue with the government. The increased number of actors in the poultry subsector has encouraged the Government to develop policies to monitor and regulate the poultry sector. The Government waved importation taxes on breeding equipment and enforces regulations for operation of hatcheries and breeder flock to minimize the spread of poultry diseases and to ensure smooth transition of the poultry sub-sector. In addition, being aware that the poultry sector is now a promising economic sector the government is in the process of developing regulations for manufacturing of poultry feeds, traceability and animal welfare. The Government considers the development of a National Strategic Plan specifically for development of the indigenous chicken industry which will replicate the approach employed by RIU to other areas in the country.

## 9.7 NEW NETWORK CONFIGURATION

RIU was all about developing new, and strengthening existing network configurations. Its major achievement was the enhancement and creation of linkages between various stakeholders. The case stories provide plenty of evidence of this.

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<sup>3</sup>By the time the publication was printed the Tanzania Poultry Breeders Association was already formed and formally registered.

The indigenous chicken industry is a complex system, involving multiple stakeholders. RIU applied a holistic systems approach to developing the subsector with a special focus on enhancing or creating linkages between stakeholders. A single focus on one activity or one actor would not have contributed to the development. RIU opted for a flexible, holistic and open ended approach, where various stakeholders were interacting with each other to jointly strengthen the subsector, addressing various challenges at the same time.

Partnerships were formed on the basis of an existing or emerging need to solve a particular challenge at a particular time. The identification of the right challenge and timely addressing it are key success factors. Often, more challenges emerged simultaneously. As the programme was focusing on enhancing or creating partnerships, there was always a need to look for win-win situations. Partnerships included two or more stakeholders. Equality was regarded as an important feature of partnerships in achieving development. In several cases, RIU contributed to capacity development of one of the stakeholders in order to strengthen their position to allow for more equal partnerships. Flexible partnerships were established, based on open ended planning and responsiveness to changing needs. New partners were allowed to join activities anytime and to leave whenever it was seen that their tasks had changed or have been accomplished. RIU played a brokering role between stakeholders, facilitated, communicated, and coordinated activities. It did so with a constant focus on improving the subsector, aiming to improve livelihoods of smallholder chicken producers. This requires focus, determination, good timing, responsiveness and a “never give up” mentality.









**Research Into Use (RIU)** is a DFID funded action research and development programme designed to put agricultural research into use for developmental purposes and to conduct research on how to do this. The programme operates in six Sub-Saharan African countries and five South Asian countries. In Tanzania, the programme is implemented by **MUVEK Development Solutions Ltd.**

The main objective of the programme in Tanzania is to explore and facilitate ways of improving local innovation capacity for increased use of research, new knowledge and technologies in developing profitable agribusiness enterprises.

**For more information**

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