



Challenge Title: Technology driven business model and support methodology for small-scale animal protein producers

Challenge ID: CAS_C00004 | Published: 30-09-2014 | Deadline: 28-11-2014 (Extended)

Helpdesk: Riette van Schalkwyk | Phone: +27 (12) 844 0673 | Email: support@connectandsolve.co.za



Challenge Owner: Anonymous

Business Opportunity: Uptake of both low-tech and high-technology driven business model and methodology for the support of emerging and existing small-scale animal protein producers to optimise production, marketing and business management.

Solution Maturity: Either new conceptual technology driven business models and/or methodologies supporting existing small-scale animal protein producers or established technology driven business models and methodologies to support new small-scale animal producers, including rapid scaling and adoption across a large geographic area.

Delivery Timelines:

Phase 1: Technical evaluation of potential solution/s (1- 2 months)

Phase 2: Business readiness and integration (2 - 6 months)

Phase 3: Solution acquisition/integration and rollout (6 months - 3 years)

Reward: Opportunities for procurement, outright rights purchase, joint venture or licensing agreement and support for piloting and further development where proposed solutions have passed proof of concept.

Challenge Statement:

A multi-national consortium with expertise, product offerings and know-how in animal protein production (e.g. poultry and aquaculture) is seeking a novel technology supported business model and methodologies with which to support and expand its growing client base of existing and emerging small-scale farmers in the Eastern Cape province of South Africa. The successful offering should include both business model -and technology platforms for optimising production, management, logistics and marketing throughout the complete agricultural value chain; with the ability to interface across a large geography, and serve as a platform for rapid market development amongst small-scale farmers active in animal protein production.

Background:

South Africa (population +/-60 million) consumes on average 27 million chickens per week, supplied through either large-scale poultry production units, or imports. On a volume basis, poultry accounts for roughly two-thirds of all animal protein consumed in SA with this share of the overall animal protein market expected to continue growing year on year (South African Poultry Association). Emerging and small-scale farmers (e.g. small, medium and micro enterprises) account for the largest portion of labour (formal and informal), but the top 44 producers produce 70% of all poultry.

Sustainable animal protein production is vital to food security, job creation, land reform and rural development, especially in Africa where formal agriculture alone cannot meet the protein demands of both rural and urban societies. Two primary obstacles to sustainable animal protein production includes firstly knowledge of, and access to the appropriate technology, know-how and solutions for **establishing and growing** animal protein based farming; and secondly, considering the high-failure rate of small businesses, the absence of suitable and workable business models and practices for aiding emerging and non-farmers alike to enter and establish **long-term financially viable and sustainable** businesses in the agriculture sector.

It is against this background of increased demand, food security, the need for job creation and equitable and reform and rural development that a leading multi-national agriculture consortium is establishing a commercial retail unit in the Eastern Cape province of South Africa with the purpose of supporting emerging and small-scale farmers to radically increase animal protein production (including but not limited to poultry and aquaculture farming), in doing so assisting said small-scale farmers to enter the mainstream economy through proven agriculture know-how and appropriate farming technology. The consortium's offering aims at addressing the first obstacle mentioned above (i.e. supporting farmers in establishing sustainable animal protein production) and includes a comprehensive portfolio of agriculture technologies, know-how, farmer support and extension services with which to support small-scale farmers throughout the complete life-cycle of setting up, developing, growing and nurturing animal protein production in a small-scale farming context.

However, small-scale farming in a developing country context requires know-how and agriculture inputs beyond basic farming practices, and also extensive hand-holding and care related to business development, accounting, marketing produce, managing resources (land, labour, capital) etc.; in other words inputs towards the second obstacle facing small-scale farmers being lack of enterprise development and business incubation.

Whilst the role of technology is driving new farming practices, elsewhere in Africa, there has been limited application and integration with a specific focus on animal protein(e.g. poultry) by small scale producers, leaving them vulnerable to fluctuating prices, lack of effective stock control and logistics, disease control, feedstock control and archaic practices. Technology driven business models and methodologies hastened by Web 2.0 and Mobi 2.0 coupled with enterprise development and cutting edge business practices to assist, support, expand and nurture small scale animal protein producers, will be a game changer in ensuring adequate supply and delivering low/ affordable prices to the market in meeting growing demand and achieving food security.

The objective of the Challenge Owner is to incorporate said technology based business model as the primary market development platform for its new commercial operation based in the Eastern Cape, and in doing so develop a market of sustainable small-scale animal protein producers.

Key Specifications:

To achieve this, the proposed successful solution must;

Clearly articulate the technology and non-technology based solution to support or optimise agricultural practices by small-scale animal protein producers:

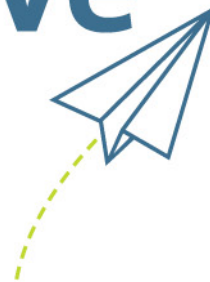
- Be already packaged and proven in the market, or been subjected to real-world market testing;
- Ensure sustainable and acceptable technology transfer practices including IP management and commercialisation that empowers small scale farming communities;
- Target small-scale enterprise development;
- Have knowledge and appropriate mechanisms for applying the offering via appropriate technology (e.g. mobile) so as to offer rapid market access and scalability across a large geography;
- Demonstrate proven experience in agriculture, especially small-scale farming and farming practices;
- Demonstrate capability and experience in rolling out enterprise development and/or small-scale farming development solutions in an emerging market context;
- The respondent should have experience in working with a multi-national commercial and for-profit company, utilising and promoting its brand and products;
- Can deploy the necessary human resources and support mechanisms to operate in a large geography (e.g. Eastern Cape Province);
- Proposed solution may include third party technologies but respondents should demonstrate capability for systems integration;
- As a secondary benefit fulfil other social related issues in addition to the primary goals.

Possible Approaches

- Enterprise Development (ED) business models, methodologies and/or practices.
- Mobile phone based rural support solutions including mAgri (mobile agriculture) offerings.
- Other technology that automates and optimises small scale agricultural practices and allows for minimum maintenance and training.

Solutions Not of Interest

- Untested concepts, research papers and/or purely academic approaches;
- Technological solutions only, without the necessary adaptation for enterprise development and/or small-scale agriculture;
- Solutions that require an extensive technology backbone infrastructure;
- Solution that are not feasible and sustainable in the long term being either too expensive to run, maintain or create exorbitant end-user costs;
- Models or practices that have potentially negative connotations, reputations and/or any aspect that may impact negatively on the consortium in respect of unethical or unfavourable fallout;
- Unethical solutions.



Phases

Phase 1: Technical evaluation of potential solution/s (1 - 2 months)

Phase 2: Business readiness and integration (2 - 6 months)

Phase 3: Solution acquisition/integration and rollout (6 months - 3 years)

Evaluation Criteria

The following criteria will be used to evaluate submissions:

- The scientific, technical merit and the ability of the proposed solution to meet the stated specifications;
- The relative cost-effectiveness of the proposed solution;
- The relative easy to use of the proposed solution;
- The viability of IP arrangements to ensure empowerment of small scale farmers without creating technology or system lock-in;
- The ability of the respondent to work successfully in a team with the Challenge owner's staff;
- The capability and experience of the respondent and associated track record;
- 2 - 3 years to commercialise.

DISCLAIMER STATEMENT.

By submitting your response to ELIDZ, you are acknowledging that all the information you are bringing forward is yours and that the information will not be deemed to contain information that you regard as confidential. ELIDZ will thus not be liable for any loss or compromise of information. Respondents are assured that by submitting their responses, they retain ownership of their IP rights, and that ELIDZ and its partners will by no means have claims over any technology presented. This disclaimer only relates to the engagement before any deal commitment between the Challenge owner and the successful respondent and thereafter the relationship will be defined according to the relationship between the two parties.