

CEPA

Achieving sustainable uptake of agricultural technologies



2010

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Introduction: Aim

These slides:

- present CEPA's observations and views about how donors and foundations can successfully support projects aimed at achieving sustainable, widespread uptake of agricultural technologies
- are intended to support officers and staff of donors and foundations in their grant making functions
- have been informed by CEPA's experience of working with donors, foundations etc on structuring, designing and evaluating agricultural development projects and programs in recent years
- summarise a more detailed report (available on request), developed by CEPA with support from the Kirkhouse Trust and the CEPA Pro Bono Fund

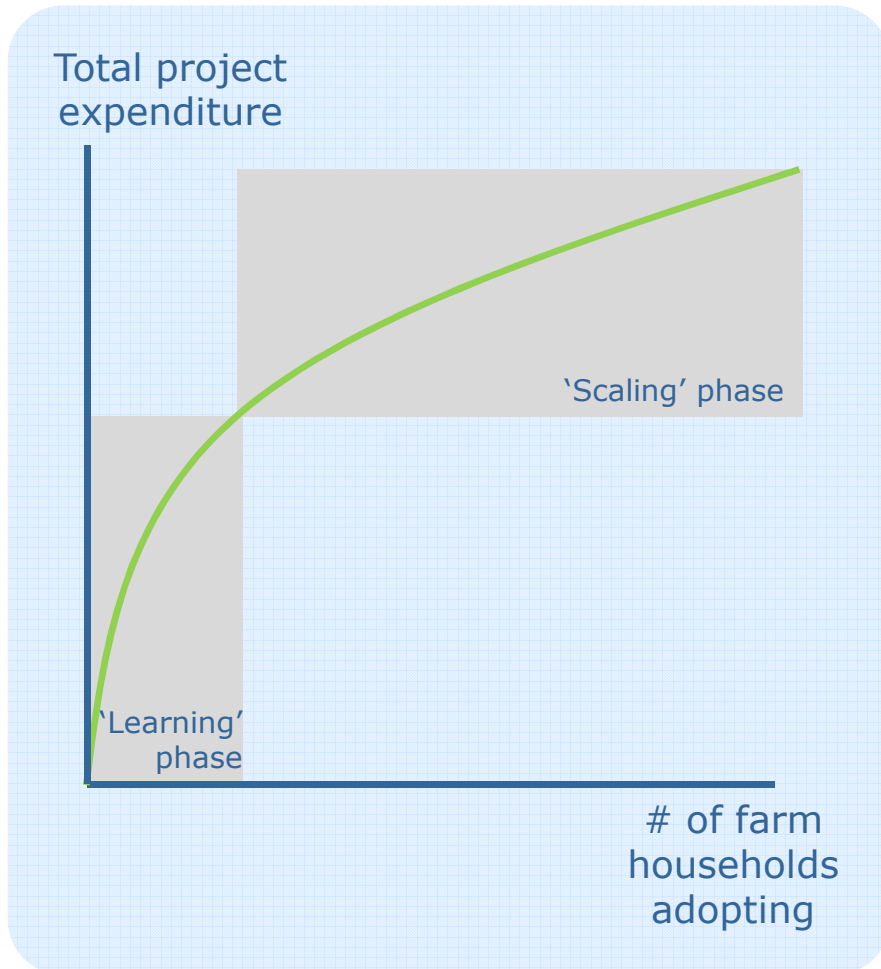


Introduction: Definitions



- **'Agricultural technology'**: includes; physical products (e.g. seeds, fertilizer etc); farming / agronomic practices or processes
- **'Sustainable uptake'**: a farmer's recurrent and consistent use of an agricultural technology (culturally accepting, physically accessing, and financially affording its constituent inputs and knowledge), without ongoing donor support
- **'Widespread uptake'** or **'scaling up'**: the challenge of moving beyond expensive extension activities that support the uptake of the technology amongst a pilot / small group of farm households

Achieving uptake: Widescale adoption or 'scaling up'



'Scaling up' involves two notional phases:

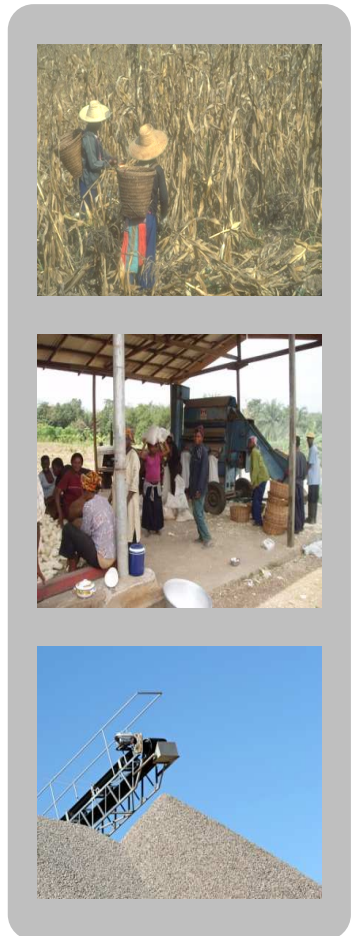
- **'Learning'**: adaptations and improvements to refine the agricultural technology, working with a relatively small number of farm households perhaps on a 'pilot' basis
- **'Scaling'**: supporting the promotion of the refined agricultural technology to large numbers of farm households

If the **scaling phase** is successful, the marginal cost per farm household adopting is expected to fall dramatically compared with the marginal cost per farm household adopting during the **learning phase**

Achieving uptake: Approaches to 'scaling up'

Different ways of 'scaling up' a technology include:

- **Farmer to farmer demonstration:** increased quantity / quality of outputs generated by a technology adopted by one farmer, is observed by neighbouring farmers who subsequently also adopt technology at zero or minimal cost to the donor/foundation
- **Private sector input suppliers expands customer base:** Seed companies, agro-dealers, agro-vets etc increase their marketing activities (demonstrations, fairs etc) as they seek to sell the technology to new smallholder farmer customers
- **Private sector commercial buyer / off-taker expands supply base:** Buyers of farm and livestock outputs (normally processing businesses or traders) increase their demand for the raw output produced farm households adopting the input technology, based on an increase in demand for final product



Achieving uptake: Understanding the proposed approach

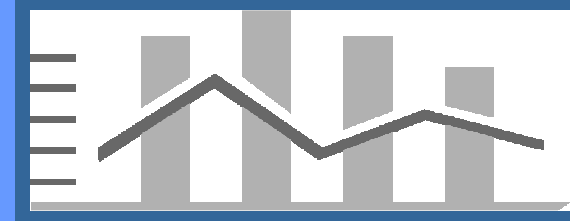
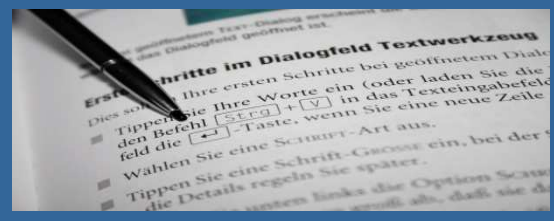


Grant proposals need to contain evidence of a considered, well structured approach to scaling the technology, including:

- **the 'what':** clearly stated intention to promote an *already proven* technology
- **the 'how':** *activities* the grantee and/or its partner(s) will manage and implement in order to promote the technology
- **the 'where':** specific *locations* where technology will be promoted
- **the 'who':** *other organizations* the grantee expects to work with / sub-contract to promote the technology
- **the 'when':** *timeline* and milestones for implementing promotional activities
- **the 'how much':** the *budget* available for promotional activities

Criteria for assessing grant-making opportunities

- In our view, potential grantees should show **evidence** that the following criteria are met (or will be met) through project activities in their grant proposals, before donors or foundations should invest in the proposed project
- The criteria presented here can be used to test the extent to which the grantee will themselves **manage key project delivery risks**, and the extent to which the grantee will work with or rely on other organizations to manage key risks
- The following are **ideal criteria** - therefore, an inability to demonstrate all of these criteria should not necessarily preclude the donor or foundation from investing in the particular project



Criteria for assessing the choice of **grantee**

<i>Criterion</i>	<i>Why is this criterion important?</i>
Experience of delivering similar projects / programs	<ul style="list-style-type: none"> • Grantee needs to demonstrate experience of delivering similar projects to the one being proposed • May be cost efficient for organization that implemented 'learning' pilot, to lead (or be involved in) 'scaling' project
Capacity and budget to deliver	<ul style="list-style-type: none"> • Grantee needs to be able to mobilize sufficient manpower / resources to deliver technology to large numbers of farmers • Grantee proposal may rely heavily on very weak or limited-capacity Government extension services to reach farmers
Relevant hard and soft skills	<ul style="list-style-type: none"> • Grantee and partners should combine scientific, agronomic, economic, financial, and technical <i>hard</i> skills, with <i>soft</i> skills for promoting technology to farmer 'on-the-ground'
Cultural experience and acceptance	<ul style="list-style-type: none"> • Grantee's staff, and the approaches to delivering technologies to farmers they use, need to be culturally accepted by farmers, their families, and communities
Activities delivered by organizations that can best manage key risks	<ul style="list-style-type: none"> • Scaling project is potentially very complex - grant proposal needs to clearly allocate responsibility and budget for the delivery of specific activities to specific partners / institutions

Criteria for assessing the choice of **technology**

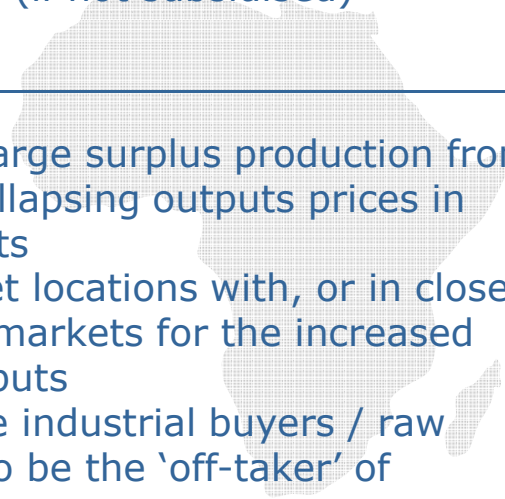
Criterion	Why is this criterion important?
Locally appropriate, proven technology	<ul style="list-style-type: none"> • Technology must address key farm-level constraint(s) • A 'proven' technology should already have been adopted by a sufficiently large (pilot) number of farm households
Accessible technology	<ul style="list-style-type: none"> • Farmers must have physical access to the technology (ideally through private sector retail points) both during experimentation (pre-adoption), and as they acquire technology on a regular basis over time (post-adoption)
Affordable technology	<ul style="list-style-type: none"> • Farmers must be able to afford to buy the technology using their own money/savings, or have access to the necessary microfinance / other external finance
Profitable technology	<ul style="list-style-type: none"> • Cost of technology (incurred by the farmer) should not reduce profit they generate from farming particular crop / livestock • Profitability of producing and selling output must <i>increase</i> once adoption of a technology occurs
Acceptable technology	<ul style="list-style-type: none"> • Mode of delivery of an animal vaccine; change in the type of crop grown etc, after adoption must be culturally acceptable
Consistency with mission & objectives	<ul style="list-style-type: none"> • Technology needs to deliver social and economic outcomes / impacts that are consistent with donor's mission & objectives

Criteria for assessing the choice of **geography** (1)

Criterion	Why is this criterion important?
Area containing large number of potential beneficiary farm households	<ul style="list-style-type: none"> • Proposal should clearly define target geographical areas (villages, districts, countries, cropping system etc) • Project may target multiple locations (with same technology and scaling approach etc) to ensure widescale adoption
Relatively developed private sector input supply companies	<ul style="list-style-type: none"> • Proposal should target locations where private sector input supply companies exist, in order to provide a commercially sustainable supply of inputs beyond the end of the project • Support development of private sector-led input supply chains, and only work with public sector and NGO input supply mechanisms / programs as an interim measure
Relatively developed networks of trained agro-dealer retailers / access points	<ul style="list-style-type: none"> • Locations should feature functioning networks of (preferably private sector) agro-dealers to provide farmers with access to the input technology beyond end of project • Prioritise locations where other donors / foundation have made agro-dealer investments • Where no agro-dealer networks in place, support creation of agro-dealer networks

Criteria for assessing the choice of **geography** (2)

Criterion	Why is this criterion important?
Sufficient extension agent resources	<ul style="list-style-type: none"> • Large numbers of extension agents may be needed to deliver the required extension information (and inputs) to farmers • Grantee needs to be able to access and manage extension manpower (from public or private sectors) to deliver project
Locally available source of farmer finance	<ul style="list-style-type: none"> • Grantee should demonstrate that farm households can access finance to pay for the technology (if not subsidised)
Functioning output market for the target crop or livestock output	<ul style="list-style-type: none"> • Farmers collectively generating large surplus production from adopting new technology, risk collapsing outputs prices in unlinked / inefficient local markets • Critical need for projects to target locations with, or in close proximity to, functioning output markets for the increased volumes of farm or livestock outputs • Ideally, locations where there are industrial buyers / raw material processing businesses to be the 'off-taker' of increased production volumes



Criteria for assessing the choice of **geography** (3)

<i>Criterion</i>	Why is this criterion important?
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Effective water catchment, harvesting, management	<ul style="list-style-type: none"> • Grantee should target farmers that have access to and can utilise effective water catchment, harvesting and management to maximise impact
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Relatively secure access to land	<ul style="list-style-type: none"> • Target locations where access to land is relatively secure (to reduce risk of farmers being removed from their land if the value of the land they occupy increases following adoption of the technology) • Locations where land tenure systems are relatively well developed and enforced • Locations where there has historically been relatively low frequency of contestation of land claims • Locations where local land dispute resolution mechanisms are relatively effective
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Contact information

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