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**Agriculture Finance Note #1 - Lessons Learned from World Bank Projects Using Matching Grants**

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*This note aims at analyzing lessons learned from Matching Grants projects for farmers and agricultural SMEs and providing guidance to TTLs on successful design. It is part of a series of agriculture finance policy notes. This note has benefited from peer review comments by Mike Goldberg, Diane Hristova, and Simon Bell.*



## Background

For over two decades, many World Bank projects have used matching grants as a means to promote private sector development. A World Bank (2016) study finds that the design and implementation of matching grants vary, and it identifies several different modalities used in recent projects. Based on a review of 106 projects, the study finds that no single core design feature has a systematic impact on project outcome and success. In the absence of a clear blueprint, then, matching grant projects need to be tailored to local conditions and need to target specific market failures in order to be successful. Of the 106 projects considered in the study, 75 percent were rated successful; but the study finds that this measure of success varies dramatically between projects.

The World Bank (2016) study looked at projects with matching grants across sectors, mostly focusing on projects that sought to promote development of small and medium enterprises (SMEs) and that used the matching grant mainly to provide advisory services to targeted SMEs. In an effort to better understand the role of matching grants in agricultural projects, we used the data from the same study and further analyzed projects that focused on agriculture. This sample includes 21 projects, 15 of which have closed. The detailed analysis is based on information obtained from Project Appraisal Documents (PADs), Implementation Completion Reports (ICRs), Implementation Status Reports (ISRs), and Independent Evaluation Group (IEG) reports.

## Matching Grants in Agricultural Projects

In examining our sample of 21 projects, we made a number of observations about the use of matching grants in projects related to agriculture

- **Regional distribution.** Over the period 1996–2015, most agriculture matching grant projects have focused on Africa, although Latin America and the Caribbean is the region with the largest volume of matching grant components overall.
- **Ratings.** Matching grants projects for agriculture generally have higher ratings than non-agriculture projects. Among rated matching grants projects for agriculture, 73 percent have ratings of “satisfactory” or above for the matching grant component, compared to 47 percent for non-agriculture projects.
- **Size.** Matching grants projects for agriculture are generally larger than nonagricultural projects. The average fund amount is US\$46 million for closed agriculture projects compared to US\$8 million for closed non-agriculture projects.
- **Economic justification.** Most projects lack a strong economic justification for the use of matching grants. Many projects identify the lack of rural finance as a sufficient rationale for matching grants, without fully identifying the relevant market failure or seeming to consider whether other instruments might be more appropriate to unlock rural and agriculture finance.
- **Objectives.** Most projects do not set appropriate outcome and impact objectives. The 14 closed agriculture projects used a total of 31 monitoring and evaluation (M&E) indicators, 60 percent of which were output indicators such as “number of funded projects” or “number of beneficiaries.” Only a few projects included the mobilization of private sector financing in outcome indicators.
- **Outcome.** Matching grants generally have positive impact on productivity and agricultural income. However, these impacts are not always well monitored.

- **Matching grants and groups.** While non-agriculture projects sometimes restrict eligibility to single firms,<sup>1</sup> all of the agriculture projects in the sample allow groups of farmers or SMEs to apply for a common project or to benefit jointly from Business Development Services (BDS).
- **Matching grants and level of match.** A majority of agriculture projects in the sample (60 percent) offered a level of matching of 50 percent or above. In addition, a majority (60 percent) offered different levels of matching depending of the type of beneficiary or activity, an approach that seems to be linked to positive outcomes. Most rated projects that had various levels of matching (86 percent) had ratings of satisfactory or above, compared to 50 percent for projects that had a single level of matching.
- **Eligible expenses:**
  - ✓ There are generally two types of eligible expenses under agriculture matching grant projects: (1) agricultural infrastructure investments (such as irrigation equipment in Mali), and (2) technical assistance (TA; such as efforts in Panama to form productive alliances).
  - ✓ **Equipment.** All agriculture projects allowed the purchase of equipment through matching grants, compared to under a third (31 percent) of non-agriculture projects. Agriculture projects include equipment as an eligible expense because investments in equipment (e.g., irrigation infrastructure, storage facilities, processing, farm machinery etc.) are both highly necessary for farmers and agricultural SMEs and very hard to finance with purely commercial funding, since lenders are often reluctant to lend to agriculture, particularly for long-term horizons. Although there is still some debate around financing equipment through matching grants<sup>2</sup> such investments generally carry positive externalities as they are often allowed for village groups and cooperatives, with spillover effects on the overall rural economy and also often have environmental and social benefits (positive externalities).
  - ✓ **Other expenses.** In some cases, the project design allowed incremental working capital to be subsidized, but land acquisition, operating expenses, and civil works were usually not allowed. Incremental working capital financing is especially desirable when it is for a pilot production run or as a demonstration for asset use. Beyond that, it is preferable that bank commercial financing is sought which would be of lower amount and shorter time horizon than equipment hence more easily accessible (particularly if the equipment can be used as collateral).
- **Technical assistance.** A majority of projects (73 percent) offered a form of diagnostic or technical assistance that could be carried out before and/or after the matching grant application. Such support included a mandatory initial diagnostic to verify eligibility, TA to prepare sound business plans (provided free of charge or for a fee), a complementary project component to create a pipeline of applicants, and continuous provision of TA to support beneficiaries from application to implementation. The World Bank (2016) review of 106 projects identifies this feature as the design modality most often correlated to positive outcomes. The sample of agriculture projects also shows that of rated agriculture matching grant projects that include diagnostics and/or TA, 70 percent are rated satisfactory or above.
- **Matching grants and own contributions.** While in most cases matching grant beneficiaries are expected to bring their own contribution in cash, some projects also allowed in-kind own

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<sup>1</sup> This restriction is included in 28 percent of 106 projects reviewed in World Bank (2016).

<sup>2</sup> See for instance Phillips (2001)

contributions. In a few other cases, projects required beneficiaries to contribute to local funds to finance future common projects, usually rural development projects.

- **Matching grants and selection mechanisms.** A vast majority of agriculture projects (86 percent) selected applicants on a first-come, first-served basis and not on a competitive basis. Of the projects that employed the first-come, first-served mechanism, 80 percent have ratings satisfactory or above. But given the small number of projects selected on a competitive basis, it is hard to determine whether the choice of selection mechanism brings any systematic benefits.
- **Link to other project components.** Matching grants are generally part of larger projects with other components, which in some cases include access to finance. Only 27 percent of agriculture matching grants projects included an access-to-finance component, compared to 34 percent for all World Bank Group projects (including non-agriculture). This specific component may include setting up a line of credit for financial institutions, offering a partial credit guarantee, or providing technical assistance to financial institutions. By addressing the root cause of the lack of agriculture and rural finance, such a feature may be very effective at ensuring the sustainability of matching grant projects. Such a feature also seems to be associated with positive outcomes, as 75 percent of rated projects that included an access-to-finance component had ratings of satisfactory or above. However, including an access-to-finance component is not necessarily the only way to ensure links with the financial sector.
- **Links with financial sector.** While most matching grant projects do not include a specific access-to-finance component, some projects have promoted links between matching grant beneficiaries and financial institutions. They have done so through four major approaches: (1) financial institutions advise beneficiaries in the preparation of their business plans; (2) financial institutions are involved in managing grants, including appraising and disbursing grants; (3) financial institutions are required or incentivized to provide credit to finance part of the grant activities; and (4) financial institutions are deposit takers, and beneficiaries are required to save a specific amount and/or at a specific frequency from the proceeds of their activities. Projects that promote such links with financial institutions generally show a positive impact on access to and usage of financial services.

## Lessons Learned and Recommendations

The following recommendations reflect emerging good practices for improving the additionality and sustainability of agriculture matching grant projects.

1. **Before designing a project with a matching grant component, a strong economic rationale must be established** for including such a component, and market failures must be properly described (e.g., lack of demand for or supply of business development services, limited supply of financial services, limited bankable demand for financial services). The following are among the market failures that are encountered in projects with matching grants:
  - **Uncertainty over benefits and externalities.** Situations in which farmers and agricultural SMEs are unaware or uncertain of the benefits of investments in technology. Matching grants could aim to introduce new technologies and practices that contribute to higher productivity and at the same time generate positive environmental and social externalities that benefit the broader rural society and not just the beneficiaries of the project.
  - **Lack of longer term finance and perceived riskier profile of beneficiary and project.** Situations in which longer-term funding to finance assets is unavailable, either because longer-term liquidity is lacking or because banks and financial institutions wish to focus

on short-term working capital and perceive riskier the longer-term gestation of the project as well as the beneficiary's credit risk profile (in many cases they do not have sufficient information to assess it).

- **Lack of acceptable collateral.** Situations in which targeted beneficiaries lack collateral acceptable to developing country banks and financial institutions, many of which lend only against a fixed asset, usually real estate, as collateral.
2. **If an identified market failure is the lack of access to finance for farmers and agricultural SMEs,** improving access to agricultural and rural finance should be one of the project's objectives. This could include explicit mechanisms in the project implementation design that would facilitate the exposure and linkages between financial institutions and project beneficiaries. For example, financial institutions could have a role in the implementation of the matching grant component. Even in the cases where financial institutions may refrain from lending to these beneficiaries, at least their exposure to them will enable them to collect data and familiarize themselves with such clients which could lead to eventually lending to them.
  3. **In order to judge whether a matching grant is the most cost-effective instrument to improve access to agricultural and rural finance,** constraints on agricultural and rural finance should be systematically assessed through an agriculture finance diagnostic, and various alternative instruments should be considered to replace or complement matching grants. Where a matching grant component is included, moreover, criteria for targeting beneficiaries and activities should be transparent, carefully chosen, and clearly justified.
  4. **Matching grants design features should be determined carefully to foster links with the financial sector.** Specifically,
    - **A matching grant should target specific investments and types of beneficiaries, particularly those with limited access to finance;** by the end of the project, however, banks and financial institutions should be familiar with these investments and types of beneficiaries and should continue providing financial services to them.
    - **The size of the grant and level of grant matching should vary by type of beneficiary (microenterprises and farmer groups, small enterprises, or medium enterprises) and by type of investment (training, technical assistance, assets) so as to ensure take-up and additionality.**
    - **Beneficiaries' contribution must be set high enough to ensure ownership and to crowd in commercial credit.** If one of the market failures is lack of finance and the matching grant aims to promote private sector financing, then having the grant component represent a very large percentage of the investment may discourage the use of financial markets. Matching grant components should be sufficient to encourage participation and investments, but not so large that they allow the client to finance a very large percentage of the project free of charge and without needing to tap into financial markets.
    - **Matching grants should aim to finance longer term investments, particularly with sufficient environmental and social externalities, and capacity building/advisory services for farmers and agricultural SMEs that require longer-term funds,** which may not exist at all or may prove difficult to find for the purpose of funding these needs. Where the new assets require additional (or incremental) working capital, it may be justifiable for the first year to cover part of this additional working capital with a matching grant, as long as the working capital does not exceed a certain level. One possibility is to cap it as a percentage of the total eligible

- investment for additional working capital. Regardless of the actual amount allocated to working capital, the matching grant should be used for a transformation in activities undertaken, with the working capital contribution essentially to ensure funds for a first test run or pilot of the new product being offered. If the percentage of grant is very high, it may be preferable then to focus exclusively on financing the assets and business advisory services; the working capital should be left for financial institutions to finance.
- **Financial institutions can play a role in matching grants projects through various modalities:**
    - ✓ **For beneficiaries who have no relationships with financial institutions, a path toward financial inclusion should be promoted as a key activity within the matching grants project.** This path could include financial institutions as deposit takers in parallel to legal formalization of beneficiaries' enterprises, and preparation of business plans and financial accounts.
    - ✓ **For beneficiaries who have existing relationships with financial institutions, a stronger financial discipline may be required.** Such approach could crowd in commercial credit through lower level of matching or by offering varying level of matching based on commercial credit obtained.
    - ✓ **For beneficiaries who have lost access to finance,** financial institutions could play a leading role in the identification and selection of matching grants beneficiaries.
    - ✓ **Where financial institutions' lack of agriculture-related information and expertise is identified as one of the key market failures,** engaging financial institutions in the advisory or management of matching grants should be considered. This would expose financial institutions to information and data about beneficiaries that could use eventually to lend to them.
  - **Technical assistance to help matching grants beneficiaries prepare business plans and proposals for financing can help ensure that the matching grant is successfully executed.** It can also help financial institutions understand these projects and enable them to finance them (to complement the grant and beneficiaries' own contribution). Ideally, the technical assistance would also include promoting the program, ensuring that applicants meet established project criteria, and providing ongoing support and mentoring beyond the initial business plan and financing proposals.
  - **Matching grants should explore synergies with other parts of the larger project.** For example, investment climate reforms could address the market failures that preclude farmers and farmer organizations from using nontraditional (e.g., moveable) collateral for borrowing. Likewise, coordinating grants with partial credit guarantees and TA to banks and financial institutions could aim at promoting private sector financing and introduce banks and financial institutions to new types of clients and bankable investments.

Other key good practices in the implementation of matching grants include the following:

- **Projects that include matching grants should include an appropriate M&E framework,** indicators, and some guidelines for impact evaluation to justify the use of public funds to subsidize private sector investments. In addition to the usual indicators that measure absorption of project funds and reach (beneficiaries, investments, etc.), suggested additional indicators should include three broad categories:
  - ✓ **Access to financial markets.** Such indicators to an extent would depend on the financial market failure identified in the project as part of the justification for matching grants, but

could potentially include access to credit through financial institutions by targeted beneficiaries, access to savings accounts, etc.

- ✓ **Cost-efficiency:** should focus on the cost efficiency of the use of matching grants for example, by comparing the matching grant size to its operating costs, benefits generated, etc.
- ✓ **Spillovers and Increased Business Activity:** Indicators should focus to measure impact beyond direct project beneficiaries and also capturing potential environmental and social benefits from investments promoted by matching grants.
- **Although there is no clear evidence of the best way to select projects and investments for matching grants, a competitive mechanism** with specific time-bound windows for applications is useful for limiting availability and for enabling choice among several competing projects.
- **Projects with matching grant components should have a specific matching grant manual** setting out the process for grant application, evaluation, disbursement, and monitoring, and also including forms/templates to be used and dedicated sections for financial management and procurement. Where possible, simplified procurement rules should be used for the acquisition of good and services under matching grants.
- **Involving the matching grants PIU in the drafting and adjustment of the matching grants manual is important to strengthen the capacity of the PIU, ensure project ownership, and to ensure that processes are flexible.** Throughout the project, the matching grants manual should be a working document that can be adjusted according to circumstances.
- **Contracts with Business Development Service (BDS) providers should be designed to ensure quality and results.** For instance, TORs may include a payment schedule where most of the payment is made at the end of the contract based on the achievement of specific objectives (e.g. productivity improved, website built etc.)
- **A strong communication plan about matching grants since the beginning of the implementation is key to ensure uptake, equal access to grants, accountability and to foster spillovers.** For instance, showcasing matching grants beneficiaries on local television, radio and social media increases project ownership and decreases the risk of grant misuse. Additionally, it can foster innovation and technology adoption among non-beneficiaries which is a key expected impact of matching grants projects. TTLs should work in coordination with social development specialists to ensure communication material and information reaches indigenous populations. this strategy should include partnering with organizations at the local level, such as district agencies, rural associations, and cooperatives

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## Annex: List of Core Agricultural Matching Grants projects

Project ID	Project Name	Fiscal Year Approved	Country	Matching grant fund amount (mUS\$) (number)	Expected number of beneficiaries	Is there an access to finance component (Y/N)	Percent of match (%) (fill in)	Implied MG component rating
P048505	MX AGRICULTURAL PRODUCT	1999	Mexico	343	Irrigation: 33,000 small individual producers Dairy: 10,000 groups and 51,000 producers Improved pasture: 110,000 producers 750,000 poor and small producers	No	50% for small farmers, 70% for poverty targeted rural development program	Satisfactory
P076467	IN: Chatt DRPP	2003	India	53	20k community investment projects,	No	95%	Moderately Satisfactory
P063622	NG-Fadama SIL 2 (FY04)	2004	Nigeria	58.2	2k Panchayat (village) plans supported	No	90% for rural infrastructure development (beneficiaries to contribute 10% in cash or kind) 60% for Productive Asset Acquisition (increased to 70% during implementation)	Satisfactory
P084792	IN: Assam Agric Competitiveness	2005	India	37.8	80k groups of 3-4 farmers for irrigation projects 2.2k groups of 10-20 farmers for mechanization projects 15k farm families for micro-watershed drainage projects	No	50% for irrigation and mechanization (initially 30%), 70% for drainage, 50 to 90% for fisheries	Satisfactory
P049721	AGRIC COMPETITIVENESS	2005	Kazakhstan	26.69	800 subprojects	No	40% for post-harvest infra projects,	Moderately Satisfactory
P104567	CO-Second Rural Productive Partnerships	2008	Colombia	24.8	300 PP with 25,300 farmers	No	40	Satisfactory
P064918	PA Rural Productivity (former 2nd Rur Po	2007	Panama	19.8	70 business plans of rural producer associations, representing 5,000 small-scale producers	No	90% max (association provides minimum 10% in cash or in kind)	Satisfactory
P108885	VN - Agriculture Competitiveness Project	2009	Vietnam	10.6	100 partnerships	No	40%	Moderately Satisfactory
P081704	ML: Agr Compet & Diversif (FY06) - (PCDA)	2006	Mali	9.9		550 Yes	67%	Highly Satisfactory
P096105	SL-Rural Dev & Priv Sec Dev SIL	2007	Sierra Leone	8		No	75% for domestic market improvement component, 50% for agricultural export promotion, 90% for support to farmers associations	
P087925	BO Land for Agricultural Dev	2008	Bolivia	7.8	2,200 families	Yes	80%	Moderately Satisfactory
P070063	ZM-Agr Dev Support Program (FY06)	2006	Zambia	3	40k beneficiaries, 40 projects	Yes	50% (Extension and technology development) 60% (Studies and pilot) 75% (Support to smallholder producer organizations)	Satisfactory
P049724	AGRIBUSINESS & MARKETING	2005	Kyrgyz Republic	1.3		Yes	30% match to cooperatives, the other 70% loan from PFIs who administer program - match only paid after loan is repaid	Satisfactory
P110588	Sudan Gum Arabic Export Marketing Projec	2010	Sudan	0.75	30 producer associations	No	33% for private companies and 67% for public agencies/producer associations	Satisfactory
P083609	SN-Agr Markets & Agribus Dev (FY06)	2006	Senegal			No	Variable for small producers and SMEs. Business partnerships: 80% for smallholders, 50% for SMEs. Irrigation: 50% for family-farms, 20% for SMEs. Red meat 50%	