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Preliminary Results from the Analysis on IFAD Cofinancing

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Contents

Abbreviations and acronyms	ii
Executive summary	iii
Key messages	iii
Next steps	iv
Background	1
I. Historical patterns in IFAD cofinancing data	1
A. Cofinancing by replenishment cycle	1
B. Regional differences in cofinancing	2
C. Regional trends in cofinancing	3
D. Types of cofinanciers in IFAD projects	5
II. Analysis of the drivers of cofinancing: Method and results	6
A. Methodology	6
B. Selection of key variables of interest and results	7
C. Country-related variables	7
III. Project-related factors	9
A. IFAD-related factors	9
IV. Correlation between cofinancing and country characteristics as reflected in rural sector performance and IFAD Vulnerability Index	10
A. Rural sector performance	10
B. IFAD Vulnerability Index	12
V. In-kind cofinancing	12
VI. Cofinancing from the private sector	13
Appendices	
I. Data sample	
II. Project sectors	

Abbreviations and acronyms

APR	Asia and the Pacific
CPM	country programme manager
ESA	East and Southern Africa
GRIPS	Grant and Investment Projects System
ICO	IFAD Country Office
IVI	IFAD Vulnerability Index
LAC	Latin America and the Caribbean
LIC	low-income country
NEN	Near East, North Africa and Europe
NS	not significant
OECD	Organisation for Economic Co-operation and Development
RSP	rural sector performance
Spanish Trust Fund	Spanish Food Security Cofinancing Facility Trust Fund
UMIC	upper-middle-income country
WCA	West and Central Africa

Executive summary

Key messages

1. IFAD's overall cofinancing during the 20-year period from 1995 to 2014 shows a decreasing trend from the period covered by the Eighth Replenishment of IFAD's Resources (IFAD8). The highest cofinancing ratio was achieved during IFAD8, while IFAD10 appears to be the most challenging replenishment cycle thus far. The international development context between 2010 and 2012, together with the food crisis, may have driven the exceptional cofinancing recorded in IFAD8. Contributions from the Spanish Food Security Cofinancing Facility Trust Fund (Spanish Trust Fund) were also a significant source of cofinancing during IFAD8 (see section I.A).
2. Significant differences exist between regions and within each region, and a few key countries drive the cofinancing ratio (see section I.B).
3. A quantitative analysis was undertaken to determine the drivers of IFAD's domestic and international cofinancing. The analysis will provide the basis to develop IFAD's cofinancing strategy and action plan in line with the relevant IFAD11 commitment.¹
4. The results of the analysis identified several statistically significant variables related to country, project and specific IFAD-defined characteristics (see section II).
 - Most notably, income level, rural institutional performance, fragility and vulnerability matter, as does rural population size;
 - Large projects with extended partnerships are found to be key to resource mobilization; and
 - IFAD's relationship with the country, using the number of projects managed by a country programme manager and in the portfolio as a proxy, also have a significant impact.
5. Furthermore, a strong correlation was found between a country's rural sector performance and IFAD Vulnerability Index (IVI) scores and cofinancing (see section III).
6. Preliminary findings, therefore, call for a differentiated approach at region and country level, as the same requirements cannot be applied across the board within a single income category.
7. The criticality of recognizing and reporting in-kind domestic contributions from governments, beneficiaries and implementing partners has not been emphasized to date in IFAD. We believe that this has led to an historic underestimation of such contributions, which can be significant in certain projects.
8. A technical note on in-kind domestic cofinancing has been prepared. It provides clear guidance at the design, implementation and auditing stages of a project life cycle on the systematic recognition, measurement and reporting of in-kind contributions as part of domestic cofinancing. This will allow IFAD to enhance its capabilities as an assembler of development finance and enhance IFAD's ability to fully report on the mobilization of these resources. The note will be included in the strategy for IFAD cofinancing and action plan.
9. While IFAD deploys considerable efforts to record data on private contributions leveraged, the potential for underestimation must still be addressed and an effort made to capture the catalytic effects (see part V).

¹ See GC 41/L.3/Rev.1, Report of the Consultation on the Eleventh Replenishment of IFAD's Resources, annex I: IFAD11 matrix of commitments, monitorable actions and timeline.

Next steps

10. Complete the analysis by analysing the differences between approved and actual cofinancing at completion.
11. Finalize the qualitative analysis through further consultation.
12. Finalize the case study on private sector catalytic effects.
13. Drawing on the studies and analytics, including the technical note on in-kind contributions, and present the strategy and action plan called for as one of the IFAD11 commitments, including inputs into new design and implementation procedures.

Preliminary Results from the Analysis on IFAD Cofinancing

Background

1. To address the development challenges facing the world as articulated in the 17 Sustainable Development Goals under the 2030 Agenda for Sustainable Development, investments of all kinds from multiple sources need to be assembled and maximized at both the national and international level and involving both public and private resources.
2. One of the main directions in the business model for IFAD11 is that IFAD must become a catalyst of development finance, to enhance its impact over and above the ambitious target of an IFAD11 programme of loans and grants of US\$3.5 billion. Therefore a cofinancing target ratio of 1:1.4 has been set, up from the IFAD10 target of 1:1.2.
3. To support reaching this target, IFAD committed to undertake a cofinancing analysis and develop a strategy and accompanying action plan "to reach a cofinancing ratio of 1:1.4 (international 1:0.6 and domestic 1:0.8), define different forms of cofinancing and methodologies for their calculation, including quantification of in-kind contributions, improve monitoring and reporting on cofinancing by source and country category, and better measure IFAD's crowding in of private investment".²
4. Cofinancing is discussed in the context of IFAD's Transition Framework, where IFAD not only wants to identify how to best support countries to tackle their specific development challenges, but also to identify what a country's fair contribution should be, and how other development partners should collaborate in a coherent manner.
5. This document presents the preliminary results of the cofinancing analysis, which will inform the above-mentioned strategy and action plan cascading corporate targets into regional ones to be incorporated in the formulation of country strategies. Feedback from the Working Group on the Transition Framework will be incorporated.

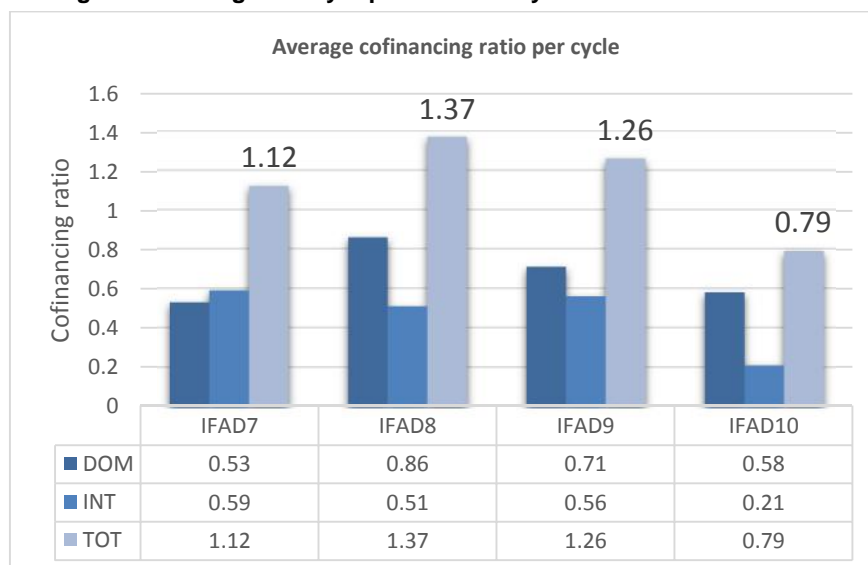
I. Historical patterns in IFAD cofinancing data

A. Cofinancing by replenishment cycle

6. Figure 1 shows the evolution of IFAD's average domestic and international cofinancing ratio achieved during the past four replenishment cycles. The highest total cofinancing ratio was recorded in IFAD8, driven by domestic cofinancing. The highest international cofinancing ratio was achieved during IFAD7. The peak in IFAD8 may be attributable to an exceptional cofinancing amount in the East and Southern Africa (ESA) region, triggered by the 2010-2012 international food crisis. In addition, the Spanish Trust Fund, mobilized in 2011, provided significant international cofinancing during this period.

² See reference in footnote 1.

Figure 1
Average cofinancing ratio by replenishment cycle

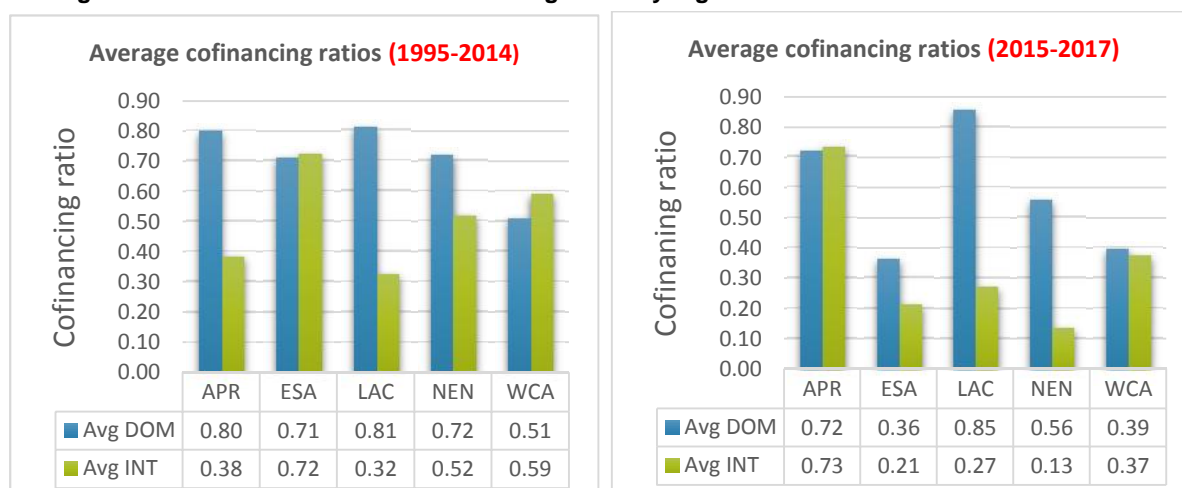


Source: Grant and Investment Projects System (GRIPS), investment projects financing data as of March 21, 2018.

B. Regional differences in cofinancing

7. Figure 2 below compares the average domestic and international cofinancing ratios of IFAD's five regional divisions. On average, considering the period between 1995-2017, the Asia and the Pacific (APR) and Latin America and the Caribbean (LAC) divisions recorded the highest domestic cofinancing ratio. The top countries driving domestic cofinancing in APR are middle-income countries: India (1:1.54), China (1:1.46), Maldives (1:0.88), Philippines (1:0.82) and Bangladesh (1:0.67). In LAC, domestic cofinancing is driven by Brazil (1:1.88), Argentina (1:1.79), Bolivarian Republic of Venezuela (1:0.91), Ecuador (1:0.91) and Paraguay (1:0.76).
8. The highest international cofinancing ratios between 1995 and 2014 were recorded in ESA and West and Central Africa (WCA). However, the past three years have been challenging for ESA, which posted a significant decrease, while WCA maintained its performance. APR, on the other hand, has seen a significant improvement.
9. The top five countries in ESA are Swaziland (1:3.88), Angola (1:1.34), Madagascar (1:1.33), United Republic of Tanzania (1:0.99) and Burundi (1:0.97). In WCA, international cofinancing is the highest in Togo (1:1.51), Ghana (1:1.13), The Gambia (1:1.06), Niger (1:1.02) and Mali (1:0.85). LAC recorded the lowest international cofinancing ratio on average over the period. This was attributable in part to the high volatility of donors' contributions in the region. Another major constraint to resource mobilization in LAC is the shift in national priorities from rural to urban development issues as the region experiences increasing urbanization.

Figure 2
Average domestic and international cofinancing ratios by region 1995-2014 and 2015-2017

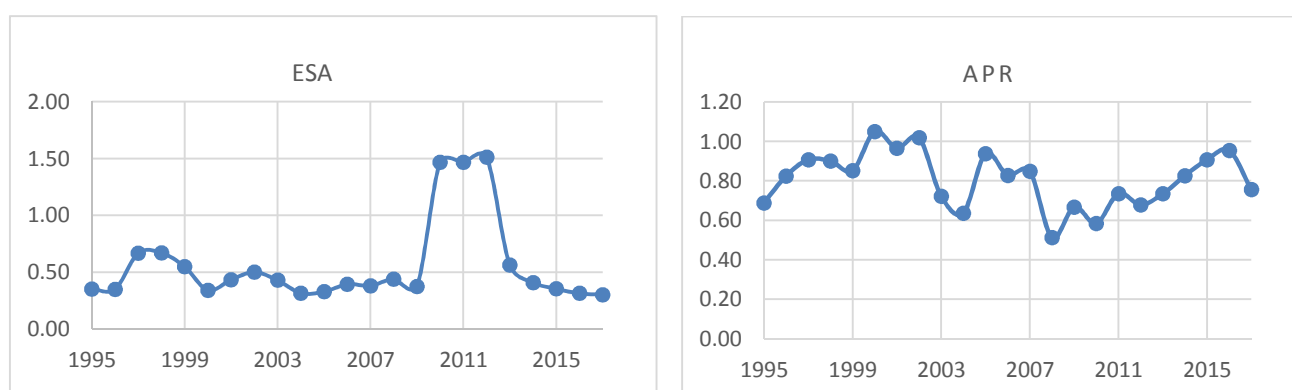


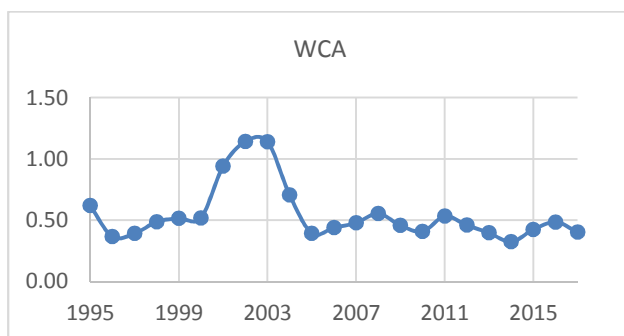
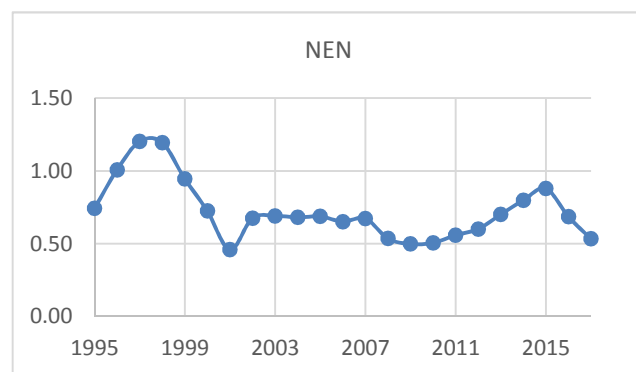
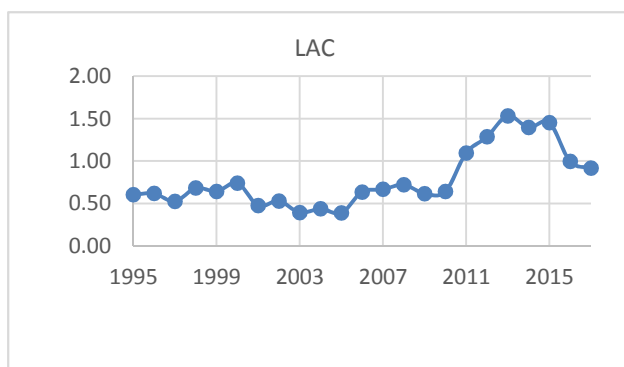
Source: GRIPS, investment projects financing data as of March 21, 2018.

C. Regional trends in cofinancing

10. Figure 3 below displays trends in domestic cofinancing ratios within the five regional divisions. Domestic cofinancing between 1995 and 2017 shows a downward trend in all regions except LAC. It is the highest in APR on average; however, this masks a declining trend over time. ESA has experienced the most stable domestic cofinancing over time although the average absolute value remained low.
11. As seen in figure 3, WCA has experienced difficulty in maintaining substantial domestic resources over time. On one hand, highly constrained economic conditions and high country fragility may explain this trend. On the other hand, the region can be considered as having the greatest development challenges as most of the countries are low-income countries with a considerable number of development projects and initiatives competing for limited public budgets.

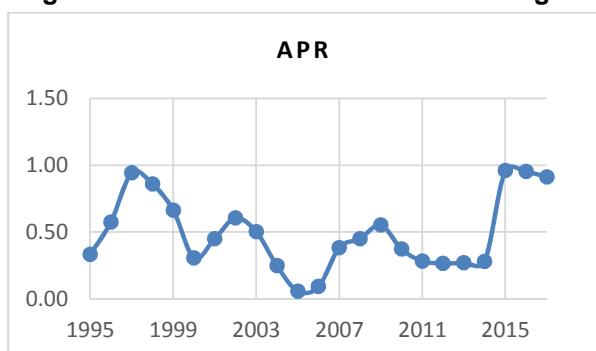
Figure 3
Regional trends in domestic cofinancing ratios 1995-2017

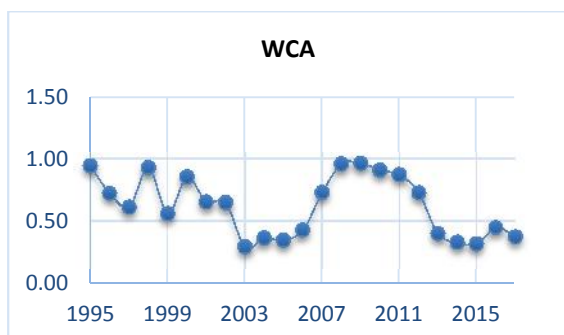
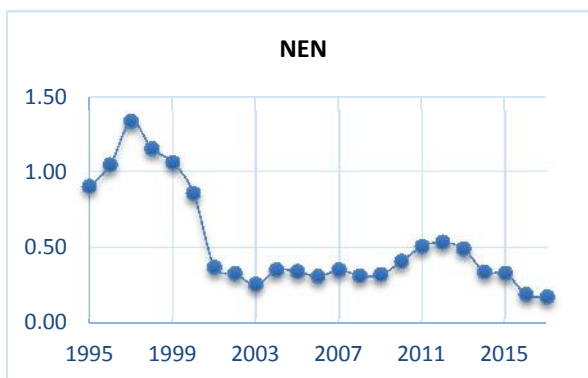
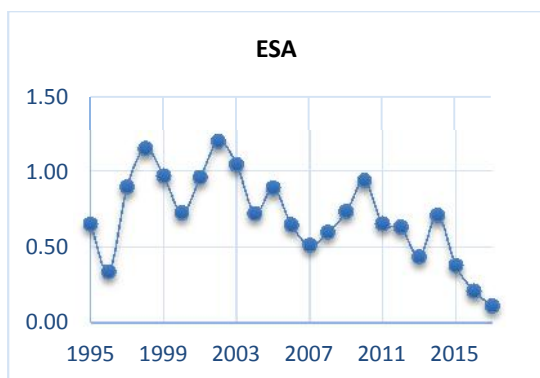




12. High variability can be observed in international cofinancing across years. This lack of stability needs to be addressed, but also offers historic learning opportunities – in terms of project characteristics, donor types and institutional changes – where cofinancing ratios have significantly improved.
13. International cofinancing ratios during the period 1995-2017 follow a declining trend in all regions except for LAC between 2007-2014 (see figure 4). Nevertheless, the level of international cofinancing is the lowest in LAC on average.

Figure 4

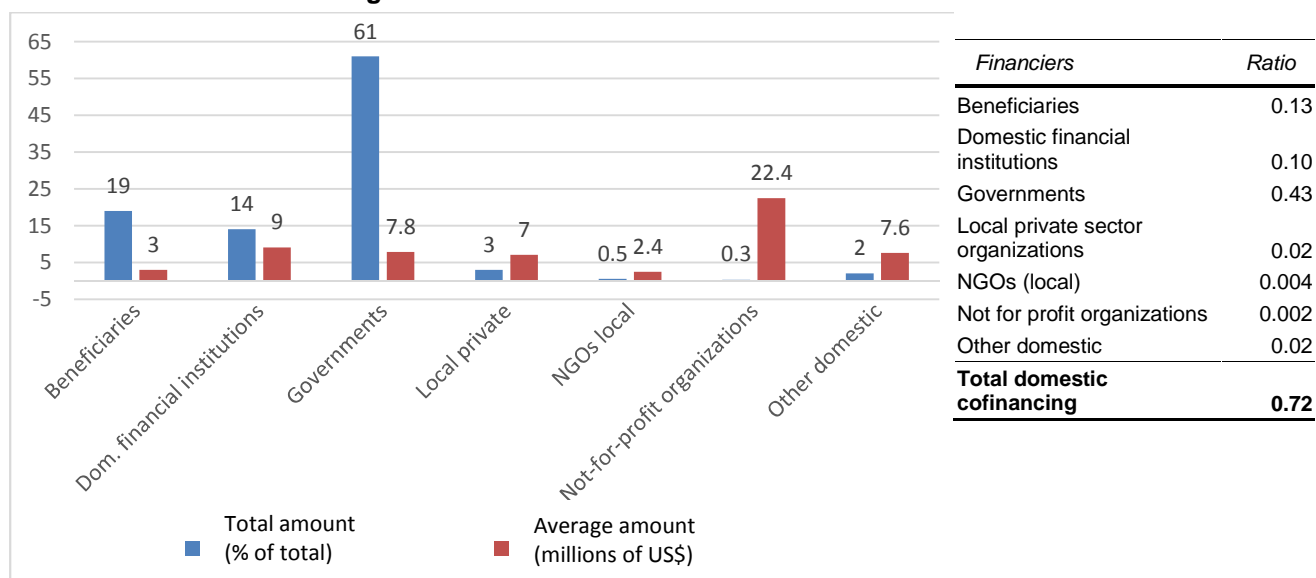
Regional trend in international cofinancing ratios 1995-2017



D. Types of cofinanciers in IFAD projects

14. Over the last 20 years, 94 per cent of total domestic cofinancing came from governments, beneficiaries and domestic financial institutions. The overall domestic cofinancing ratio for the 20-year period was 0.72 per cent.
15. The breakdown of domestic and international cofinancing by type of financier as presented below supports the development of mapping donors with key areas of interest, thereby helping IFAD to adopt a more informed selective approach to resource mobilization.

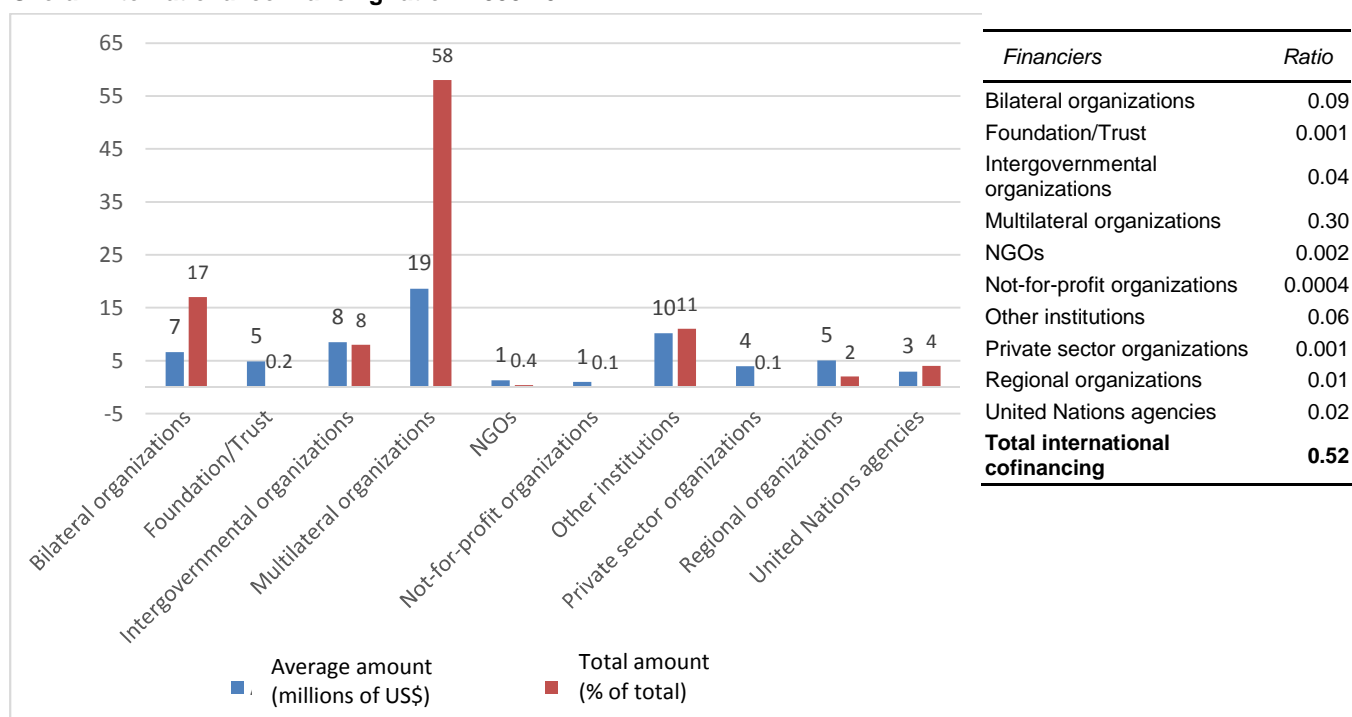
Figure 5
Overall domestic cofinancing ratio – 1995-2014



Source: GRIPS, investment projects financing data as of October 10, 2017.

16. International cofinancing has been driven mainly by multilateral, bilateral and intergovernmental organizations, which provide about 83 per cent of the total international contributions.
17. As expected, over the period analysed, 58 per cent of contributions came from multilateral organizations. Regionally, the main multilateral contributions came from the International Development Association, the Global Environment Facility (GEF), the African Development Bank and the Global Agriculture and Food Security Program.
18. Bilateral donor organizations contributed 17 per cent of the cofinancing, mainly from the Agence Française de Développement, the Spanish Trust Fund and the SNV Netherlands Development Organisation.
19. Preliminary discussions within IFAD also confirmed that leveraging pooled cofinancing, as in the case of the Spanish Trust Fund and GEF, rather than single-project cofinancing, provides a better and more stable source of resources.

Figure 6
Overall international cofinancing ratio – 1995-2014



II. Analysis of the drivers of cofinancing: Method and results

A. Methodology

20. The aim of this analysis is to identify the factors that influence IFAD's cofinancing performance. The first part of the analysis focuses on data on the approved cofinancing committed by the project partners at design phase. In a second part, the analysis focuses on investigating differences between the amount of cofinancing committed at approval and the actual amount disbursed during the lifetime of the projects. This second aspect will be included in the next iteration of the report.
21. For each of these two parts of the analysis, a two-step approach has been adopted. The first step is a quantitative analysis performed using regression models, trend analysis and descriptive statistics. The second step complements the quantitative

analysis with qualitative information from discussions with key internal informants such as regional economists and portfolio advisors.

22. Cofinancing data is disaggregated into domestic and international contributions to align with Management's approach in setting separate targets for these two aspects. Cofinancing ratios are computed yearly based on a three-year moving average. This method has the advantage of smoothing outlier values in the ratios compared to current practices at other multilateral development banks.

23. Details on the regression model and the source of data are found in appendix I.

B. Selection of key variables of interest and results

24. While most studies on aid allocation rely on country-related macroeconomic variables and to some extent project-related variables to capture these three dimensions of the aid allocation framework, this study extends the common framework by including variables under IFAD's direct control. This distinctive feature will be a key source of information for the cofinancing strategy.

C. Country-related variables

Income level

25. Two aspects of the countries' income level are considered. The first aspect pertains to the poverty status and is captured by; (i) gross national income per capita (GNIpc); (ii) income status: low-income country (LIC), lower-middle-income country or upper-middle-income country (UMIC). As expected, the results of the panel regression confirm that income, expressed both as GNIpc and as income category, has a positive correlation with domestic cofinancing.
26. The second aspect of income level is growth in GDP as an indicator of a country's economic performance. The data show that the higher the GDP growth, the higher the level of international cofinancing. The opposite effect is recorded on domestic financing. One explanation of this result may be that countries with growing GDP attract more foreign direct investment, thus reducing the need for financing from the national budget.
27. The results of the effect of income on cofinancing are presented in table 1. The coefficients represent the size of the estimated effect of each variable. For example, being in the LIC category lowers a country's domestic cofinancing ratio by an estimated 29 per cent.

Table 1
Income variables

Variables	Country factors			
	Domestic ratio		International ratio	
	Impact	Coefficient ^a (%)	Impact	Coefficient ^a
Income effect				
GNIpc growth	+	2**	Not significant (NS)	(0.012)
LIC	-	(29)***	NS	0.02
UMIC	+	34***	-	(0.35)*
GDP growth	-	(3)***	+	0.03**

^a International ratio is specified in level form, hence the coefficients are in absolute incremental value of the ratio. Domestic ratio is specified in a logarithmic form, hence the coefficients are in percentages.

Note: The star (*) indicates the statistical significance level of the coefficient (*** p<0.01, ** p<0.05, * p<0.1).

Population

28. Population density (measured as the number of inhabitants per km²) and rural population size (measured as a percentage of total population) are used to capture the population effect on domestic and international cofinancing.

29. Population density. Since need increases with population size, the analysis shows that population density has a statistically significant effect on international cofinancing, in line with past studies.
30. Rural population. As most of the poor in developing countries live in rural areas, the size of the rural population is correlated with poverty status. Data confirm the expectation of a negative effect of rural population size on domestic cofinancing.

Table 2
Population variables

Variables	Country factors			
	Domestic ratio		International ratio	
	Impact	Coefficient (%)	Impact	Coefficient
Population effect				
Population density	NS	0.022	+	0.00084***
Population growth	NS	5.1	NS	0.008
Rural population (% total pop.)	-	(0.7)**	NS	(0.00132)

Note: The star (*) indicates the statistical significance level of the coefficient (*** p<0.01, ** p<0.05, * p<0.1).

Fragility status

31. The effect of country fragility on cofinancing is estimated through three predictors included in the model, namely the country's classification as "in a fragile situation",³ the occurrence of natural disasters in the country (number of times) and the total population affected by the natural disaster.
32. The regression analysis confirms the assumption that fragility is negatively correlated with domestic cofinancing, which is 30 per cent lower in countries with fragile situations than in non-fragile situation countries. On the other hand, fragility is positively correlated with international cofinancing.
33. International cofinancing is also positively correlated with the total number of people affected by natural disasters, but the relationship is not significant.
34. The data show that international cofinancing is significantly less when a country experiences conflicts or experiences high exposure to natural disasters. This result points to the conclusion that fragility embeds both a risk and a humanitarian need dimension that affects foreign aid allocation differently. While the humanitarian dimension has a positive effect on international cofinancing, fragility and the associated risks have a negative impact.

Table 3
Fragility variables

Variables	Country factors			
	Domestic ratio		International ratio	
	Impact	Coefficient (%)	Impact	Coefficient
Fragility effect				
If country with fragile situation	-	(30.4)***	NS	0.169
People affected by natural disaster	+	3.12e-07**	NS	1.81e-09
Occurrence of natural disaster	+	2.30***	-	(0.0221)*
State conflict	NS	(0.105)	-	(0.287)**

Note: The star (*) indicates the statistical significance level of the coefficient (*** p<0.01, ** p<0.05, * p<0.1).

³ As per the Harmonized List of Fragile Situations used by the Organisation for Economic Co-operation and Development (OECD).

III. Project-related factors

35. Project characteristics such as size and sector are of strategic importance when it comes to mobilizing development funds.
36. Findings on the effect of project size are presented below. Insights on the distribution of domestic and international cofinancing amounts across the project sector are presented in appendix II.

Project size

37. The project size variable is included by clustering projects into small (total budget \leq US\$18.8 million), medium (US\$18.8 million $<$ total budget $<$ US\$49.12 million) and large projects (total budget \geq US\$49.12 million). This categorization is based on the following distribution:

Small project = total budget \leq US\$18.8 million (25th percentile)

Medium project = US\$18.8 million $<$ total budget $<$ US\$49.12 million

Large project = total budget \geq US\$49.12 million (75th percentile)

38. The analysis clearly shows that small projects tend to attract significantly less domestic cofinancing than do larger ones. This result is in line with what internal consultations have revealed on the effect of a larger portfolio and calls for a more programmatic approach in IFAD engagement with developing countries.

Table 4

Selected project variables

Variables	Project-related factors			
	Domestic ratio		International ratio	
	Impact	Coefficient (%)	Impact	Coefficient
Project size				
Small project size	-	(0.3)***	-	(0.22)**

Note: The star (*) indicates the statistical significance level of the coefficient (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).

A. IFAD-related factors

39. IFAD-related variables are potential organizational factors that place the institution in a distinctive position, either positive or negative, to leverage resources for the development projects or programmes supported.
40. Among the factors considered are lending terms, the country programme manager (CPM) profile, the presence of IFAD Country Offices (ICOs) and the number of partnerships mobilized for a specific project.
41. The data shows that the higher the value of the portfolio managed by one CPM, the higher the domestic cofinancing. One way to interpret this is that IFAD's presence in the country is more relevant, and more in line with the Government's priorities, therefore more likely to attract domestic cofinancing. The more experienced the CPM in a country, the higher the domestic cofinancing ratio. In fact, every additional year of experience acquired in a country cause the domestic ratio to increase by about 4 per cent on average – and this marginal effect is significant.
42. Regarding international cofinancing, results show that countries where CPMs manage large portfolios mobilize less international cofinancing. This seems to imply that large portfolios, while they attract more domestic resources, reduce the need for additional international actors. In contrast, the number of projects managed by CPMs is positively correlated with international cofinancing. Each additional project added to a CPM's portfolio results in an increase in the international cofinancing ratio of 0.045 points.
43. The presence of ICOs also seems to positively drive the cofinancing ratio, especially international cofinancing.

Table 5
Selected IFAD-related variables

Variables	IFAD-related factors			
	Domestic ratio		International ratio	
	Impact	Coefficient (%)	Impact	Coefficient
CPM's profile				
CPM's experience		0.0378**		(0.0128)
Number of projects managed		(0.0246)		0.0448*
Value of portfolio managed		1.14e-09**		(2.98e-09)***
ICO presence		0.0903	+	0.242*

Note: The star (*) indicates the statistical significance level of the coefficient (*** p<0.01, ** p<0.05, * p<0.1).

44. A high domestic cofinancing ratio translates into a high international ratio and vice versa. A large domestic contribution in a project translates into strong ownership from the recipient and therefore supports foreign donors' willingness to collaborate in such a project.
45. As expected, countries that succeed in building an extended partnership for IFAD's projects mobilize more domestic and international cofinancing. On average, the marginal effect on domestic cofinancing of every additional financing partner (domestic or international) in a project is about 4.4 per cent. For the international ratio, the marginal effect of an additional financing partner is an increase of 0.15 points. These effects are strongly significant.

Table 6
Other significant IFAD variables

Variables	IFAD-related factors			
	Domestic ratio		International ratio	
	Impact	Coefficient (%)	Impact	Coefficient
Project financing terms				
Non-concessional loans		(0.291)		0.101
Number of financiers		4.38**		0.153***
International ratio		25***		-
Domestic ratio		-		0.536***

Note: The star (*) indicates the statistical significance level of the coefficient (*** p<0.01, ** p<0.05, * p<0.1).

IV. Correlation between cofinancing and country characteristics as reflected in rural sector performance and IFAD Vulnerability Index

- A. Rural sector performance
46. Further dimensions that IFAD will be focusing on to enhance its ability to evaluate country characteristics, in line with the Approach to a Transition Framework, are the country performance variables included in the performance-based allocation system formula, specifically rural sector performance (RSP)⁴ and the IVI. The link between these variables and cofinancing was investigated using correlation tests.
47. Results show that domestic cofinancing is positively correlated with a country's RSP score, whereas international cofinancing is negatively correlated with the RSP score, meaning that countries with weak rural institutional capacity (RSP score class 1)⁵ attract more international cofinancing while countries with higher RSP scores attract less.

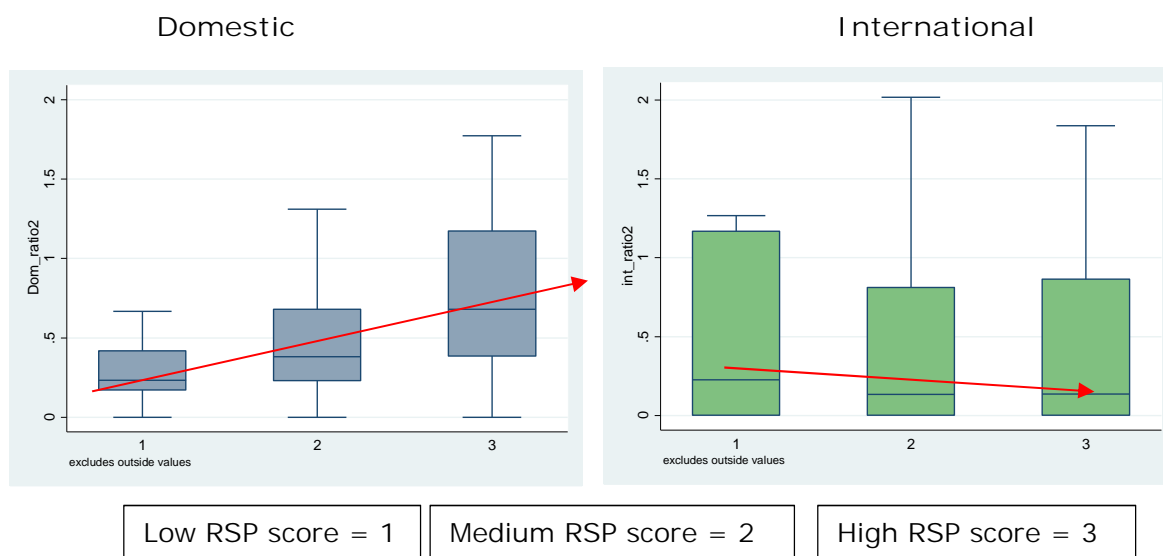
⁴ The RSP score, compiled by IFAD every three years in countries where it intervenes, is used as a measure of the quality of policies and institutions in areas related to rural development and rural transformation.

⁵ The categorization is done based on the distribution below:

- Low RSP (class 1) = RSP score \leq 3.165 (10th percentile).
- Medium RSP (class 2) = 3.165 < RSP score < 4.32.
- High RSP (class 3) = RSP score \geq 4.32 (75th percentile).

48. The figure below shows the distribution of domestic and international cofinancing ratios during the period 2007-2015 for countries with a low, medium and high RSP score.

Figure 7

Correlation between cofinancing and rural sector performance

49. The results of the univariate panel regressions reveal a strong positive correlation between domestic cofinancing ratios and rural sector institutional performance (column 1 of table 7), meaning that on average countries with a high RSP score also record a significantly higher domestic ratio.

Table 7

Univariate regression between RSP and cofinancing

<i>Variables</i>	<i>Domestic ratio</i>	<i>International ratio</i>
RSP score	0.492***	(0.237)
Constant	(1.188)**	1.692**
Observations	583	583
Number of countries	93	93

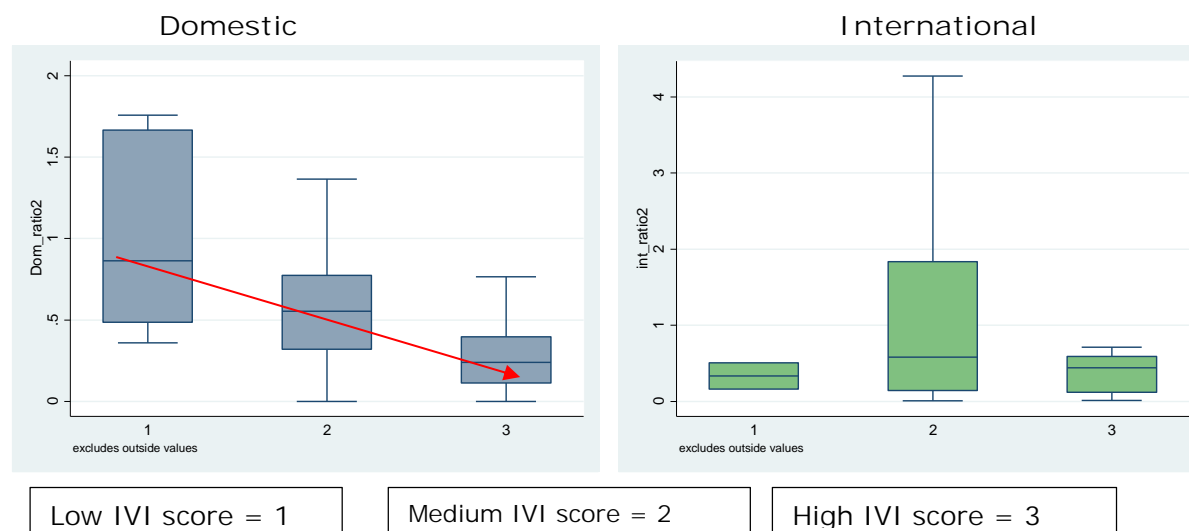
Note: The star (*) indicates the statistical significance level of the coefficient *** p<0.01, ** p<0.05, * p<0.1.

B. IFAD Vulnerability Index

50. The same test was performed on the link between cofinancing and the IVI, which is used as a measure of a country's overall vulnerability.⁶ This showed that the domestic cofinancing ratio is negatively correlated to the country's IVI score⁷ (see figure below). On the other hand, there is a positive correlation between the international cofinancing ratio and the IVI score. However, this pattern seems to be true only when comparing low IVI and medium IVI score countries.

Figure 8

Correlation between cofinancing and IFAD Vulnerability Index scores



51. The result of the univariate regression model⁸ corroborates the negative correlation detected between domestic cofinancing and the IVI. Regarding international cofinancing, the correlation test shows that, as mentioned above, very high vulnerability may be negatively correlated with international cofinancing due to the risk factor.

Table 8

Univariate regression between IVI and cofinancing

Variables	Domestic ratio	International ratio
IVI score	(0.437)*	(0.117)
Constant	1.644***	0.612
Observations	61	61
R-squared	0.047	0.000

Note: The star (*) indicates the statistical significance level of the coefficient *** p<0.01, ** p<0.05, * p<0.1.

V. In-kind cofinancing

52. According to the OECD, an in-kind contribution from project stakeholders is the transfer of ownership of a good or asset, other than cash, or the provision of a service, without any counterpart. As such, in-kind contributions can be either tangible or intangible goods transferred to an entity in a non-exchange transaction, without charge but which may be subject to stipulations, as well as

⁶ The IVI was created to capture the multidimensionality of rural poverty. It is an index of 12 equally weighted indicators that measures rural vulnerability in terms of exposure, sensitivity and lack of adaptive capacity to endogenous and exogenous causes and/or events. Each of these sub-indicators can be associated with one or more of the IVI focus areas, namely food security, nutrition, inequality and climate vulnerability.

⁷ This categorization is done based on the below distribution:

- Low IVI = IVI score \leq 0.33 (10th percentile)
- Medium IVI = 0.33 < IVI score < 0.58
- High IVI = IVI score \geq 0.58 (75th percentile)

⁸ Here ordinary least squares are considered since only the year 2017 is used.

services provided by individuals to an entity in a non-exchange transaction (i.e. salaries; labour – both professional and volunteer; partner remuneration; faculty remunerations and tax exemption). In-kind contributions represent a source of revenue, and although they are not monetary, may represent a significant portion of the project's revenue.

53. It is fundamental that in-kind contributions to projects are reported in addition to cash contributions for various reasons:
 - They are part of the effective cost of a project when factored into the project budget;
 - They may be the only or main contribution made by a borrower or recipient to a project;
 - They demonstrate to donors that borrowers and recipients of IFAD financing are significant contributors to projects and have buy-in; and
 - They will be included in the cofinancing ratio and supplement the real contributions of borrowers and recipients to projects, in addition to contributions in cash and tax exemptions.
54. Over the years 1995-2014 the overall contribution from beneficiaries was 19 per cent. From about 10 project case studies undertaken, beneficiaries' in-kind contribution is roughly estimated to be on average 13 per cent of the project total costs. In-kind contributions can also come from governments, mainly in the form of tax exemptions, services and supplies from governments and implementing partners. This part must be tracked in a more effective and analytical way.
55. Currently, in-kind contributions are not systematically recognized as part of the overall financing of a project for various reasons: (i) technical complexities in valuation and reliable measurement, including inconsistent use of accounting systems to monitor and report; (ii) a lack of understanding about the importance of providing this data; (iii) uncertainty as to the effective implementation of this type of contribution; and (iv) reluctance by auditors to provide assurances on amounts included in the financial statements. Without reliable and timely reporting of these assets, it is not possible to ascertain fully a project's economic resources and activities, making financial statements imperfect and reporting of cofinancing incomplete.
56. An internal technical note on in-kind domestic cofinancing was prepared in order to provide clear guidance at design, implementation and auditing stages of a project life cycle on the recognition, measurement and reporting of in-kind contributions as part of domestic cofinancing. This note will form part of the strategy. This will allow for systematic monitoring of in-kind contributions and enhance IFAD's ability to fully report on the mobilization of these resources.

VI. Cofinancing from the private sector

57. There is increasing attention in the literature about how to define and measure contributions from the private sector. Both aspects present challenges that IFAD will address. According to the OECD Development Assistance Committee,⁹ mobilization quantifies the direct causal link between private finance made available for a specific project and an official intervention. The term "blend finance" is used more broadly. The term "leverage" is usually associated with a ratio. "Catalytic effect" generally refers to the results of actions aimed at stimulating positive change, which may be financial (amounts mobilized) or non-monetary (knowledge transfer, sharing of new practices, introduction of a policy, etc.). It is generally recognized that the catalytic effect remains difficult to measure statistically.

⁹ OECD, Private finance mobilization by official development finance interventions, February 2016.

58. The types of private-sector contributions that are included in IFAD projects are typically as follows: (i) training and technical assistance; provision of buildings, facilities, equipment, materials, inputs services (agricultural inputs, transportation, etc.) from input service providers or commodity/agribusiness companies; and (ii) additional financial resources provided by partner financial service providers and commercial banks. It is often difficult to measure or quantify contributions under point (i), as these are often in-kind, are not known a priori or are difficult to place a current value on, and/or the private entity is reluctant to report on it.
59. Between 1995-2014, about 37 IFAD projects received private contributions. Average private cofinancing as officially recorded at design represented about 12 per cent of the project total costs. This share of private cofinancing is also reflected in case studies undertaken on five projects. In some projects, where IFAD promotes joint business models with private sector entities, including the public-private-producer partnership approach, the matching private sector contribution can be estimated and is included in project total costs. However, IFAD does not fully track whether these estimated contributions actually materialize, and more should be done to incorporate this into project monitoring and evaluation systems.
60. IFAD is performing a series of case studies on its projects to come up with a standardized methodology for measuring the catalytic effect of private sector mobilization.

Data sample

1. Using Panel regression model, an econometric estimation of the determinants of domestic and international cofinancing ratios is conducted.¹⁰ This analysis has been complemented by distributional trend analysis that highlight the main historical patterns in the cofinancing data. The data sample used for this analysis is described below.

Source of data

2. Investment Projects approved before 1995 and beyond 2014 have been excluded from the sample, restricting the analysis timeframe to a 20 year period from 1995 to 2014.¹¹
3. Other external databases have been consulted to complement the project data with country-level socioeconomic information. These sources include the World Bank's development indicators and governance indicators databases, IDEA¹²'s Global State of Democracy Indices, etc. Table 1 presents the structure and distribution of the sample.

Table 1

Panel Sample data

<i>Data description</i>	
Source	GRIPS data + external databases
Period	Projects approved between 1995-2014
Number of Projects	APR: 141 ESA: 103 LAC: 90 NEN: 103 WCA: 122
Number of Countries	109
Total Observations	Country x Year: 543

¹⁰ A panel regression model is applied to identify the most significant factors that impact domestic and international cofinancing in IFAD supported projects. The model allows the estimation of the magnitude and direction of impact of each explanatory factor. A challenge worth noting when conducting such analysis is the restricted number of studies in the literature addressing domestic cofinancing. The literature on aid allocation, albeit relatively old, is well documented on the factors explaining foreign donors' aid giving behavior, but lack substantially, empirically tested information on the incentives behind counterpart contributions. The (Word Bank, 2013) is at our knowledge the only study that had investigated determinants of counterpart funds in development projects using empirical estimation.

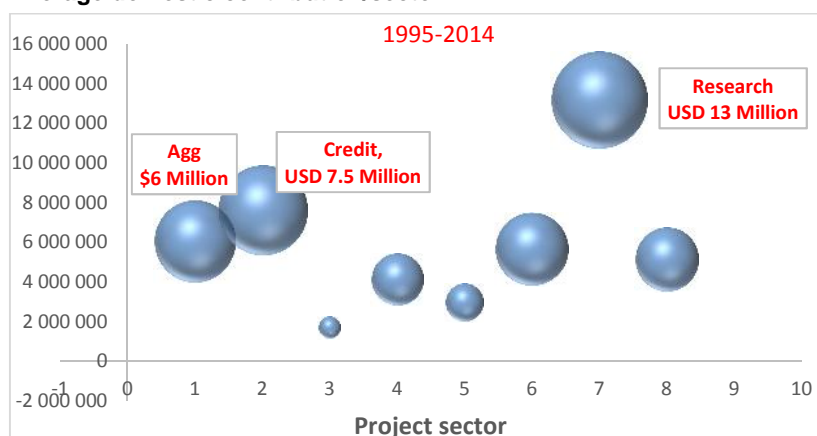
¹¹ Multiple reasons motivate this sampling decision, worth mentioning is the poor quality of the data reporting prior to early 90's when IFAD has no Corporate Databases put in place to systematize and automate the reporting of the financing and results data. Another reason is that most of the notable institutional changes or operational procedures that reinforce IFAD's role as assembler of development Funds (Business Model, IFAD partnership Strategy, General Conditions for Agricultural Development Financing etc.) occurred within the period of the last 10 years.

¹² IDEA : (International) Institute for Democracy and Electoral Assistance

Project sectors

1. The integration of donors' interests and compliance with their funding eligibility criteria is of crucial importance for an effective resource mobilization strategy. Projects 'partners adopt a selective approach in cofinancing, favoring programs whose development objectives align with their own priority areas or contribute significantly to the national strategic frameworks for poverty reduction and sustainable development. Therefore, identifying projects characteristics that incentivize most domestic and international cofinancing can support the elaboration of a more tailored approach to resource mobilization.
2. Figure 1 displays average domestic cofinancing invested per project priority sector.¹³ The data show that on average, between 1995-2014, projects implementing research activities have attracted more domestic cofinancing than others. Following the research sector, projects providing financial services and projects promoting agricultural development are respectively the second and third top projects to attract more domestic counterpart funding. In recent years (2015-2017), domestic cofinancing priority areas have shifted with more focus on Irrigation projects, Rural development projects and projects promoting marketing activities respectively.

Figure 1
Average domestic contribution/sector*

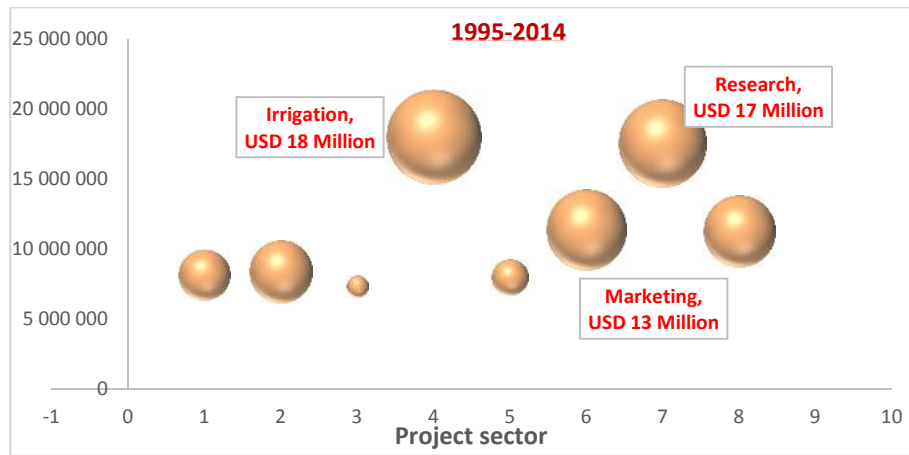


* See footnote 13 below.

3. The top three project sectors to attract most international cofinancing are respectively in irrigation, research and marketing sectors. Over the past three years, this pattern has not changed for the distribution of international cofinancing per project sector with still Irrigation projects, research projects and marketing projects driving on average more funding.

¹³ The categorization used is: 1 Agriculture, 2 Credit, 3 Fishery, 4 Irrigation, 5 Livestock, 6 Marketing, 7 Research, 8 Rural development. This categorization is currently under review.

Figure 2
Average International contribution/sector*



* See footnote 13 above.