

➤ **GrowAsia: Smallholder farming intervention Landscape in South East Asia**

Final report

26 July 2016



Grow**Asia**



Dalberg

Acronyms

Acronyms	Description
ADB	Asian Development Bank
BTPN	Bank Tabungan Pensiunan Nasional
CACIC	Cambodia Agriculture Cooperative Insurance Company
DFI	Development Finance Institution
FAO	Food and Agriculture Organisation
IFAD	International Fund for Agricultural Development
IFC	International Financial Corporation
JV	Joint Venture
KT&S	Knowledge, Training and Support
MFI	Microfinance Institution
NGO	Non-Governmental Organisation
PALD	Poverty Alleviation through Livestock Development
READ	Rural Empowerment and Agricultural Development Program
SADC	Swiss Agency for Development Cooperation
VBARD	Vietnam Bank of Agriculture and Rural Development
VBSP	Vietnam Bank of Social Policies
WCF	Working Capital Financing

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About this study (1/2)

Context and objectives of this study

- The **smallholder financing market** is underdeveloped, fragmented, and underfinanced – current estimates peg the financing gap at ~USD 450 billion. **Smallholder financing models** can be seen as a solution to help farmers scale their businesses, and buyers, diversify their sources and supply of sustainably sourced inputs
- Within South East Asia, **various actors** including governments, commercial banks, multilateral agencies, philanthropic foundations, and private investors **have been involved** in extending financing support to smallholder farmers. However, a **consolidated repository** of the ongoing efforts is **not readily available**, making it **hard to assess the landscape** of ongoing interventions
- In this context, GrowAsia commissioned Dalberg to conduct a financing landscape assessment through extensive secondary research, incorporating information from a wide range of sources including international development organizations, global and local NGOs, development and other financial institutions, government sources, private sector research
- The key objective of this exercise is to **map the landscape of interventions** that support the financing needs of smallholder farmers. This research will be made **publicly available**, and will serve as a **one-stop shop** for stakeholders interested in understanding **ongoing efforts/ active stakeholders in Vietnam, Cambodia, Myanmar, Indonesia, and the Philippines**

Brief note on the contents of this report

- The current report highlights the “big trends” in smallholder financing models across the five focus countries included in the scope of the study
- A comprehensive database of case studies covered by the study is included as a separate file. This includes a short project blurb, an overview of the program/ intervention, as well as publicly available sources/ documentation

About this study (2/2)

Our approach and methodology

- This study was designed as a rapid desk research exercise, and did not include any primary research (for example, interviews with sector experts). The findings of this study are limited to information available in public domain, and from previous Dalberg project experience.
- The project team completed its research across the five countries over a period of 4 weeks, and categorized identified cases across parameters included in the accompanying database
- The findings/ results presented are solely based on the information compiled through 148 case studies put together for the purpose of this study

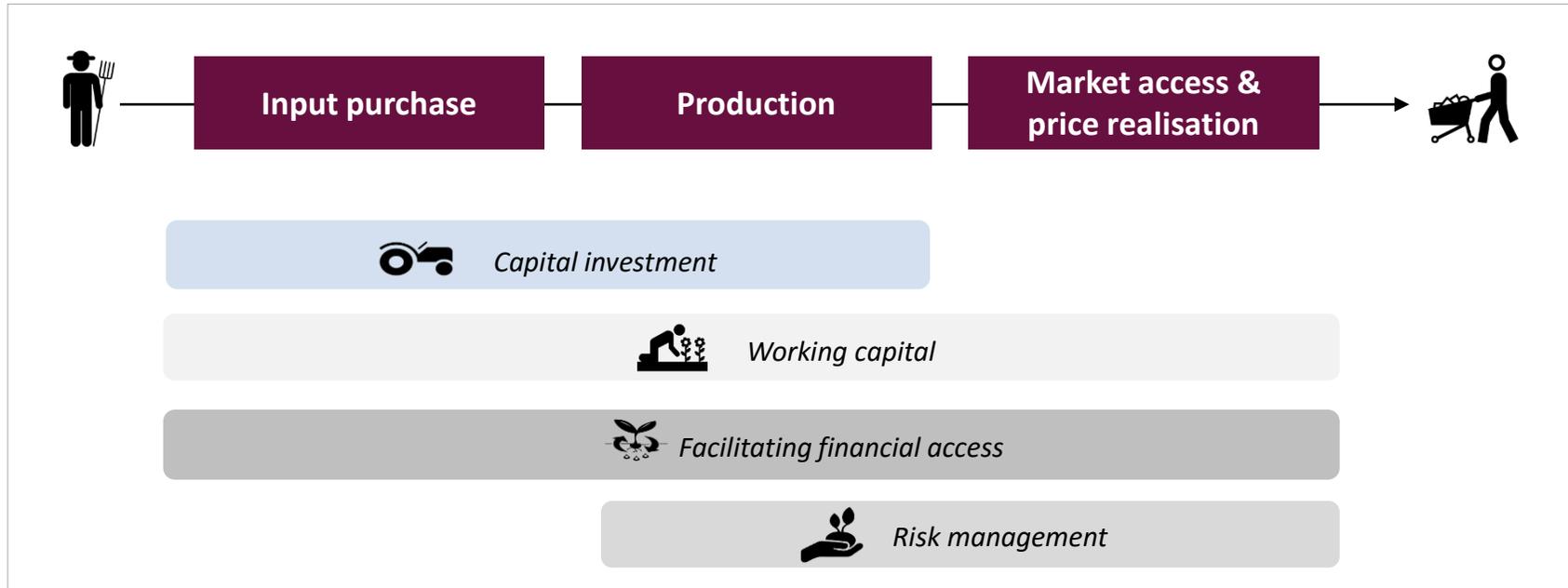
How to/ not to use this report

- Readers should not consider this report as an exhaustive landscape assessment of smallholder financing initiatives in ASEAN countries – this report should be used as a starting point to better understand top initiatives, and should be supplemented through additional primary/ secondary research, as needed
- For each of the identified financing need, the report includes a page on “key highlights” – readers should consider these pages as an interesting fact/ trend about the market in the country, rather than as a summary of the overall market landscape
- Readers should not use this report as a tool to understand the adequacy of ongoing initiatives in meeting the financing needs of smallholder farmers in the five countries as it does not include a needs assessment component

Executive summary

1. We identified **3 major types of financing needs** i.e., **Capital investments, working capital and risk management**, within which working capital being addressed the most. Additionally, we found **facilitating of financial access** a major form of intervention in smallholder finance
2. **Working capital** consists of **general short term (GST)** products and **farming input (FI)** related products. A major challenge with GST is the **perceived risk of smallholder farmers as borrowers**. However, revolving credit funds and off – take agreements are emerging solutions in this regard. In FI, there is a **lack of targeted credit products**. Organisations are working towards both individual i.e., access as part of contract agreement and community level solutions e.g., seed banks
3. **Capital investment** consists of access to **machinery, livestock, land and irrigation**. In machinery we found **few products tailored to smallholder farmers**. Lease financing and co – financing are some emerging solutions in response. In Livestock, we found an absence of specific products. Proximity Designs’ Duck loans for fodder is one possible response. Land and irrigation remained largely unexplored due to lack of significant activity
4. **Facilitating financial access** consists of providing **Knowledge, training and skills (KT&S)** as well as **integration to formal value chains (IFVC)**. In KT&S, we observed the **absence of government actors** a major challenge. However, other actors are filling this gap by either training trainers or directly working with contract farmers. In IFVC, corporates play a major role, however this **concentrates interventions towards cash crops**. An emerging solution to this was improving capacities of proximate actors in the rice value chain e.g., rice mills, to source from a large pool of suppliers.
5. **Risk management** consists of crop and life insurance. **Efforts are either nascent** or have failed in the past. In response, organisations, specifically governments, are working towards widening access to indexed insurance products. Additionally, we observed a corporate reinsure government insurance companies to incentivise greater penetration

Overview of smallholder farmer financing needs



Capital investment includes access to **machinery, livestock, irrigation and land**

Working capital includes access to **generic short term credit** as well as **access to farming inputs**

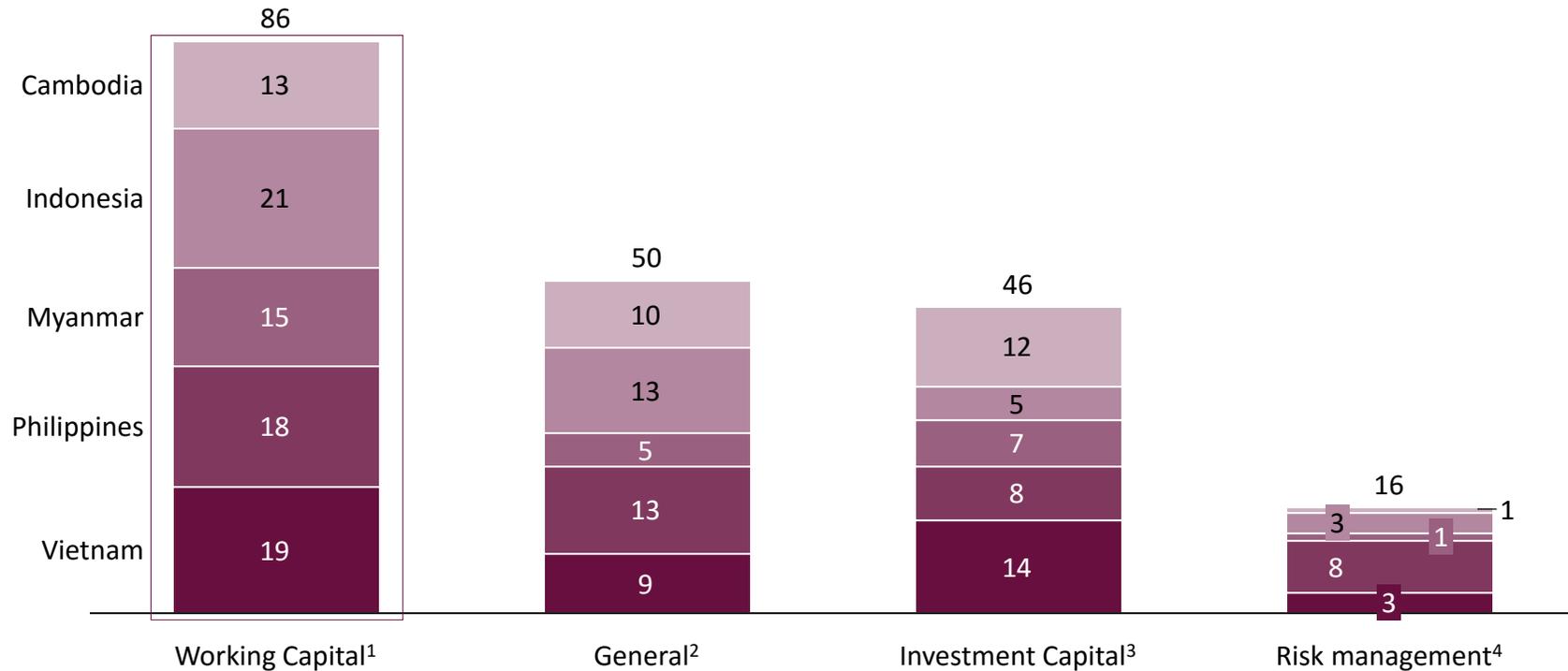
Facilitating of financial access refers to **knowledge, training and skills** as well as **market access related interventions** that serve as avenues to bolster access to formal finance

Risk management refers to **crop insurance** i.e., services that protect farmer incomes in case of extreme weather events and **livestock insurance** i.e., pay-outs in case of death of livestock

Our study suggests that working capital makes up a majority of financing needs addressed across all 5 countries

Types of smallholder financing currently being addressed

Number of needs addressed by cases covered, n = 198



This presents an opportunity to increase the size of the sector by creating tailored financial products suited to the unique needs of smallholder farmers

Note (1) Working capital pertain to short term (less than a year) general finance products with a small ticket size (2) General pertains to funding that is not meeting any specific need (3) Capital investment refers to investment in Livestock, Machinery, Irrigation and Land; (4) The total number of cases on this chart exceeds the total number of cases covered as programs/ initiatives often address multiple farmer needs

Working Capital: i) General Short Term Loans



Overview: A major challenge with GST is the perceived risk of smallholder farmers as borrowers. However, revolving credit funds and off – take agreements are emerging solutions in this regard

Definition: Short-term credit i.e., less than a year or for a single crop cycle

Challenges

- **Smallholder farmers are perceived as risky.** MFIs and commercial banks (ACLEDA Bank in Cambodia) are focusing their efforts on small enterprises, given their lower risk profile. Consequently, private financial institutions have a small portion of their portfolio dedicated to smallholders and/or few targeted products to meet smallholder farmer needs

Emerging solutions

- **Facilitating basic access through credit groups.** Increasingly organizations are facilitating basic access by creating and seeding revolving credit groups that lend to members; these groups act a springboard for access to formal finance
- **Corporate lending (as proximate actors).** This is limited to their contract farmers, consequently, their concentration is limited to regions and crops where this form of farming is common e.g., cash crops in Indonesia
- **Off – take agreements to reduce default risk.** Given the high perceived risk of lending to smallholder farmers, rural banks and MFIs in Philippines occasionally partner with either (i) in-house crop aggregators e.g., First Valley Bank or (ii) large buyers e.g., ASKI with San Miguel to reduce the default risk through off-take agreements

Major interventions observed in



Leading actors



Working Capital: ii) Farming inputs



Overview: There is a lack of targeted credit products. Organisations are working towards both individual i.e., access as part of contract agreement and community level solutions e.g., seed banks

Definition: Access to high quality seeds and fertilisers that improve soil fertility and consequently, enhance quality/ quantity of crop produced

Challenges

- **Few targeted products for input purchase.** Loans provided for input purchase are largely working capital loans which given their short ticket size may not fulfil the needs of farmers
- **Limited access to quality inputs.** Our literature survey suggests, that access to quality fertilizers and seeds to smallholders is limited. Often, local input suppliers are unaware of quality.

Emerging solutions

- **Targeted loans for input purchase.** Few examples of loans were observed that were tied to either purchase or access to fertilizers and seeds
- **Corporates facilitate access under contract agreements.** Given the quality and quantity requirements for global markets, corporates supply high yielding variety of seeds, often free of cost (Unilever, Wilmar, Bayer)
- **Community owned seed banks.** Ensuring self-sufficiency in seed access can reduce financing requirements of farmers. Both DFIs

Major interventions observed in



Cambodia



Indonesia



Myanmar



Philippines



Vietnam

Leading actors



Gov't



MFI



DFI



Corporate



NGO

Capital Investment: i) Machinery



Overview: In machinery we found few products tailored to smallholder farmers; lease financing and co – financing are some emerging solutions in response

Definition: Support for farm mechanization i.e., moving away from manual labour for tilling, harvesting or for post-production value addition activities

Challenges

- **Financing tailored to smallholder farmers.** Credit for equipment purchase have strict collateral requirements e.g., Myanmar Agricultural and Rural Development Bank demands land, equipment and often group assurance in financing equipment purchase
- **Absence of corporate involvement.** Even in countries where contract farming is ubiquitous i.e., Philippines and Indonesia, asset financing efforts from corporates are limited

Emerging solutions

- **Lease financing to improve access to smallholder farmers.** Nascent efforts from manufacturers (Yanmar in Philippines, Kubota in Cambodia) partnering with financing organisations (Ropali, GL Finance) to facilitate access to affordable equipment financing for smallholders farmers
- **Generic loan products don't support equipment financing.** MFIs can often support long term credit for farmers but uptake tends to be low e.g., MFIs can offer ticket sizes of up to \$4000 but their average ticket size would often be below \$300
- **Low cost tools can often pay for themselves.** Proximity Designs' equipment loans often witness repayment through additional earning from the equipment itself

Major interventions observed in



Cambodia

Indonesia

Myanmar

Philippines

Vietnam

Philippines

Leading actors



Gov't

Capital Investment: ii) Livestock



Overview: In Livestock, we found an absence of specific products. Proximity Designs' Duck loans for fodder is one possible response

Definition: Finance that facilitates access to animals as labour for farm operations or as additional sources of income through diversification into non-farm activities

Challenges

- **No targeted credit products.** Even in countries where governments are prioritizing livestock in agricultural financing e.g., Philippines, credit is extended through subsidized agricultural loan products
- **Corporate involvement in livestock is limited.** our study observed involvement in the case of livestock insurance. Very few cases of financing were witnessed

Emerging solutions

- **Livestock as non – farm diversifiers.** DFIs and governments are focused on producers of staple crops as target beneficiaries and to that end, there is an attempt in providing livestock as assets e.g., PADEE & EFAD in Vietnam
- **Loans for livestock upkeep.** loans targeting not just the purchase but the upkeep of livestock can be a key income generator e.g., proximity designs provides \$25 loans to duck farmers to purchase high quality fodder

Major interventions observed in



Cambodia Indonesia Vietnam

Leading actors



Gov't DFI

Capital Investment: iii) Irrigation & iv) Land

	Interventions observed	Challenges	Emerging solutions
<p>Irrigation</p>  <p>Access to water sources for farm production</p>	<ul style="list-style-type: none">• Asset financing for low cost irrigation pumps• Community owned, built and managed tarpaulin ponds• Improvement of existing public works	<ul style="list-style-type: none">• In general, very few credit programs target irrigation products for smallholders	<ul style="list-style-type: none">• Facilitating access to low cost solutions e.g., Proximity Designs in Myanmar• Supporting management of public works e.g., World Bank in Vietnam
<p>Land</p>  <p><i>Facilitating access to land for tenancy or ownership</i></p>	<ul style="list-style-type: none">• Providing access to land and land titles to landless or land poor farmers• Reclaiming bad land	<ul style="list-style-type: none">• Land ownership and titles can unlock access to finance from formal institutions, however, while subsistence farmers often lack ownership, smallholders lack the titles	<ul style="list-style-type: none">• Supporting governments in land transfer e.g., World Bank in Cambodia



Facilitating financial access: i) Knowledge, Training & Skills

Overview: In KT&S, we observed the **absence of government actors** a major challenge. However, other actors are filling this gap by either training trainers or directly working with contract farmers

Definition: Farmer training in agricultural best practises either related to farming techniques or efficient use of resources. Within this study, it also includes financial literacy and business management

Challenges

- **Absence of government led interventions.** Our research suggests, that KT&S interventions are largely led by corporates, non profits or DFIs. In countries where corporate involvement is high e.g., Philippines, KT&S is limited to cash crops, creating a gap for quality services to producers of traditional crops

Emerging solutions

- **Supporting government extension workers.** DFI involvement in training of government workers was observed which can catalyze KT&S services at scale
- **Credible anchor supporting smallholders.** Bank Rakyat Indonesia provides loans to corn farmers, incentivizing corporates e.g., Monsanto and Cargill, to provide production and post harvest support and purchase high quality produce with low risk

Major interventions observed in



Leading actors



Facilitating financial access: ii) Integration to formal value chains



Overview: Corporates play a major role, which concentrates interventions towards cash crops. An emerging solution is capacity improvement of proximate actors in the rice value chain e.g., rice mills, to source from a large pool of suppliers

Definition: Connecting smallholder farmers to large scale buyers who provide stable demand and consequently, stable and predictable cash flow

Challenges

- **Limited to certain regions and certain crops.** Contract farming was observed largely in Indonesia and Philippines with a clear focus towards cash crops
- **Social enterprises work at a small scale.** While efforts often supported a variety of farmer needs, in majority of cases their scale was observed to be below 2000 farmers.

Emerging solutions

- **Supporting agribusinesses in improving capacity.** Government institutions e.g., Rural Development Bank of Cambodia and DFIs e.g., IFAD, provide assistance to rice farmers, through demand side interventions i.e., by supporting rice mills
- **Organizations with a strong farmer can anchor interventions at scale.** Organizations such as VECO in Vietnam or ASKI in Philippines have brought together corporates for off-take and agriculture experts for technical assistance to ensure that farmers can honor quality and quantity standards of agreements in the long term

Major interventions observed in



Leading actors





Overview: Efforts are either nascent or have failed in the past. In response, organisations, specifically governments, are working towards widening access to indexed insurance products

Definition: Services that protect farmer incomes in case of extreme weather events or death, illness and accidents to livestock

Challenges

- **Poor economic viability of traditional insurance.** Previous attempts in establishing conventional crop insurance were limited by a lack of viability e.g., in Vietnam
- **Efforts are nascent in the region.** In Cambodia, the first pilot for crop insurance targeting rice farmers was initiated in 2015 and is likely to go on till 2017

Emerging solutions

- **Indexed insurance products bring more viability.** Both government (Bao Minh in Vietnam) and private actors (MicroEnsure in Philippines) are implementing at insurance products indexed to an objective metric e.g., rainfall, wind speed etc., which allows greater predictability and nullifies the cost of damage assessment
- **Products that protect farmer incomes.** An important low cost innovation introduced by MicroEnsure insures cost of fertilizers in case of extreme weather event, protecting farmer incomes at the time of income shock or asset loss
- **Corporate guarantees can widen access.** Support through reinsurance agreements to mitigate default risk (SwissRe in Vietnam) can incentivize insurance providers to increase penetration

Major interventions observed in



Indonesia Philippines Vietnam

Leading actors



Gov't Corporate Bank

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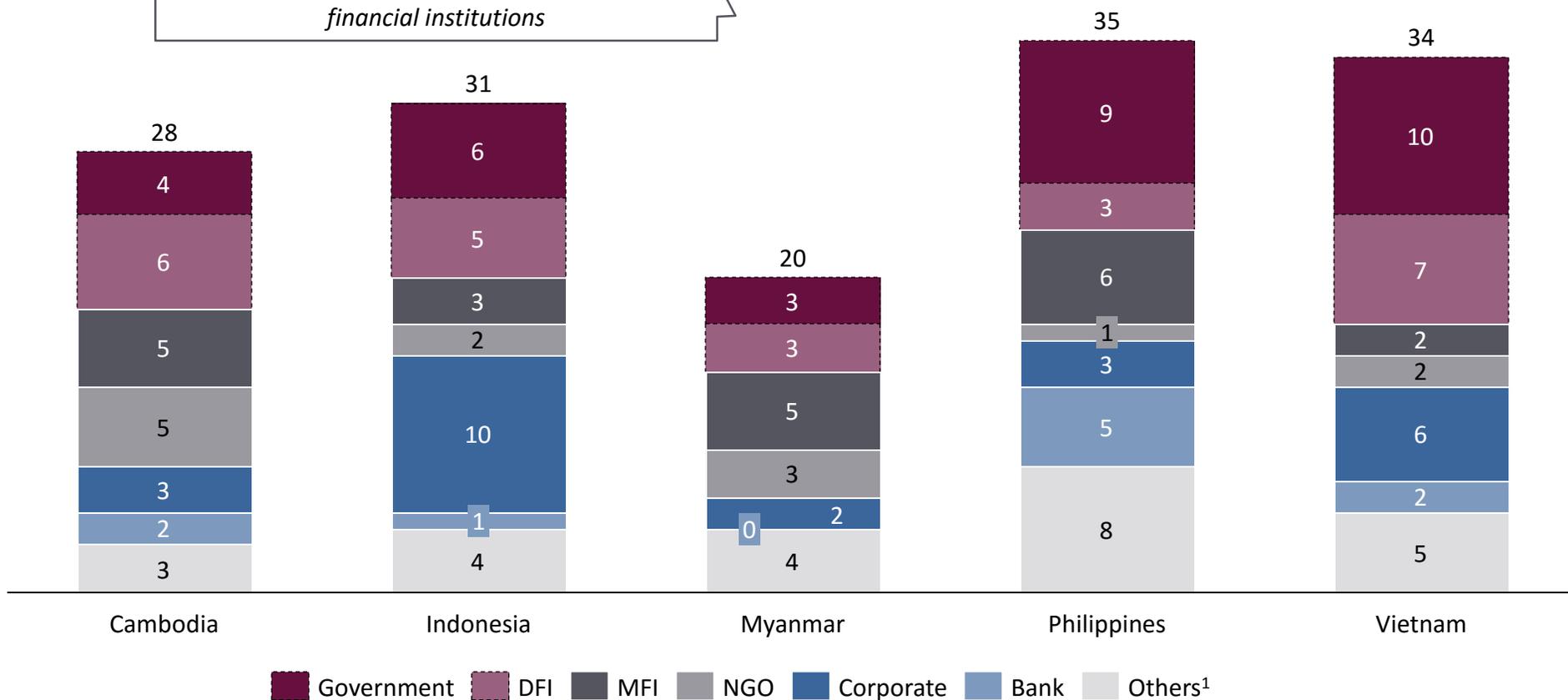
Annex

Of the 148 initiatives we studied, ~30-50% are led by multilateral and government institutions

Types of organisations leading smallholder finance initiatives

Number of cases, n = 148

Corporates have limited presence in the space, and are primarily involved through contract farming or technical assistance partnerships with financial institutions



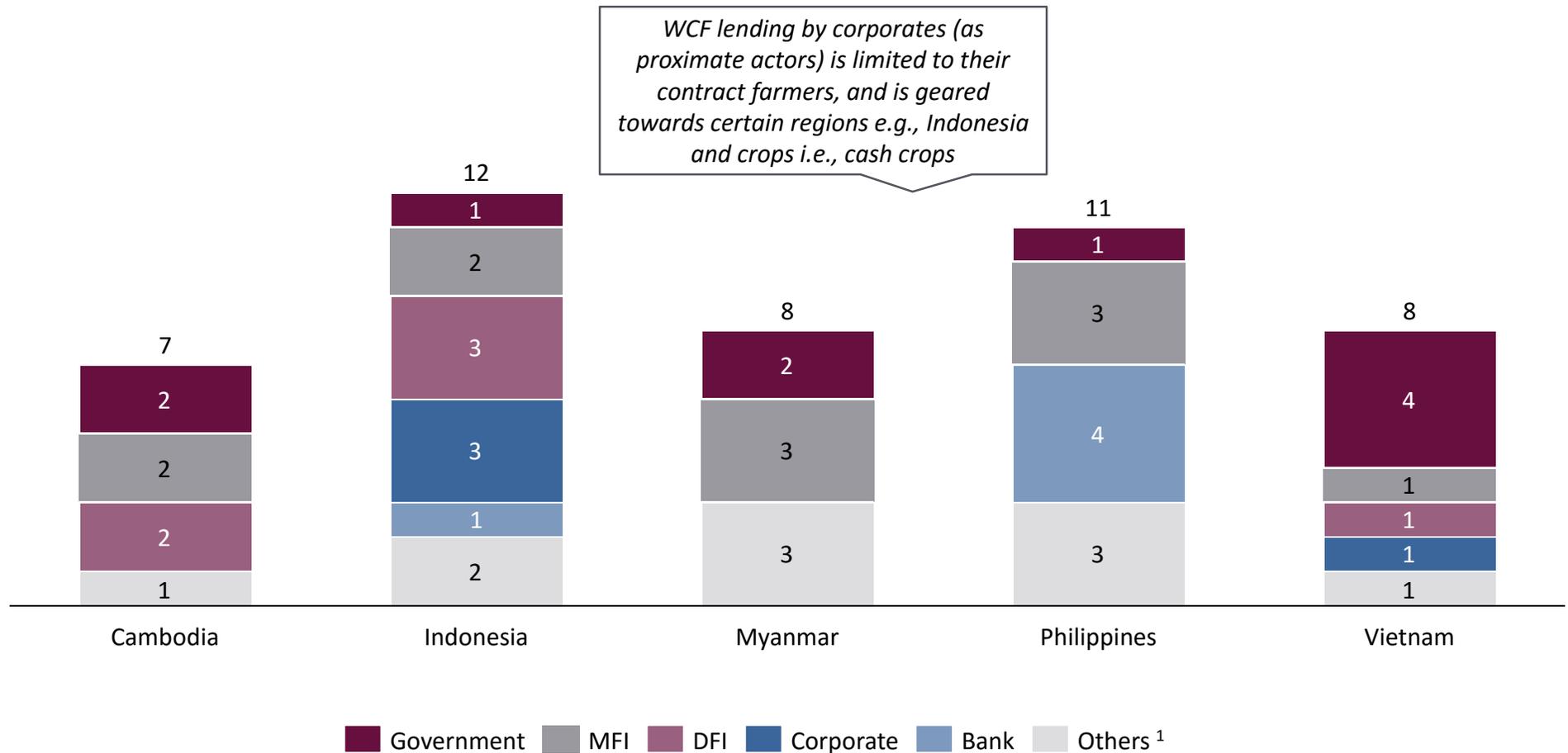
Note (1): Others represent impact investors, social enterprises, trade associations and farmer cooperatives

Source: Dalberg research; Dalberg analysis

Working capital finance (WCF): Although multiple actors provide WCF, only MFIs are present, in varying degrees, across all countries

Types of organisation types serving working capital¹ needs of smallholders

Number of cases, n = 46



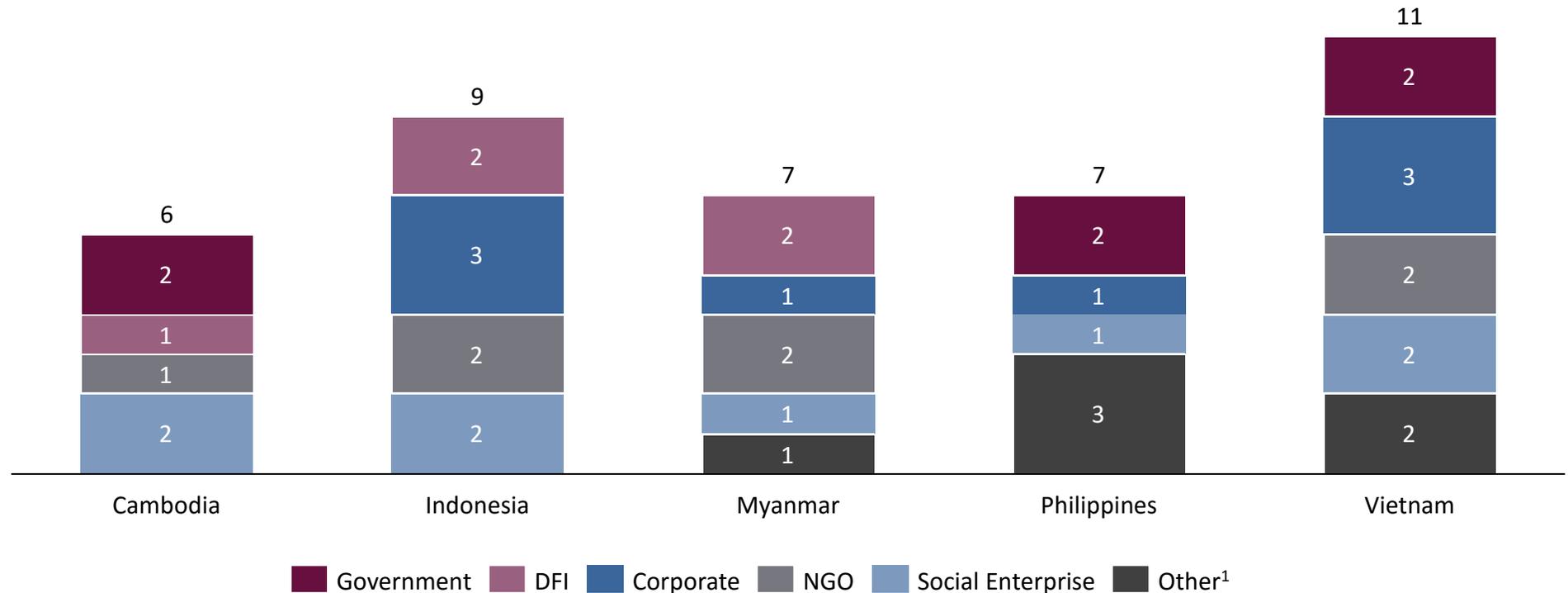
Note (1) Farmer organisations, NGOs, social enterprises and impact investors

Source: Dalberg research; Dalberg analysis

Farming inputs: Actors such as social enterprises and corporates are increasingly supporting smallholder farmers with farming inputs

Types of organisations serving smallholder farmers' financing needs for farming inputs

Number of cases, n = 40



Corporates make high quality seeds/fertilisers available to a limited number of farmers through contract agreements, while DFIs widen access considerably through community level initiatives (for example, seed banks)

Note (1) MFIs, Banks and Cooperatives

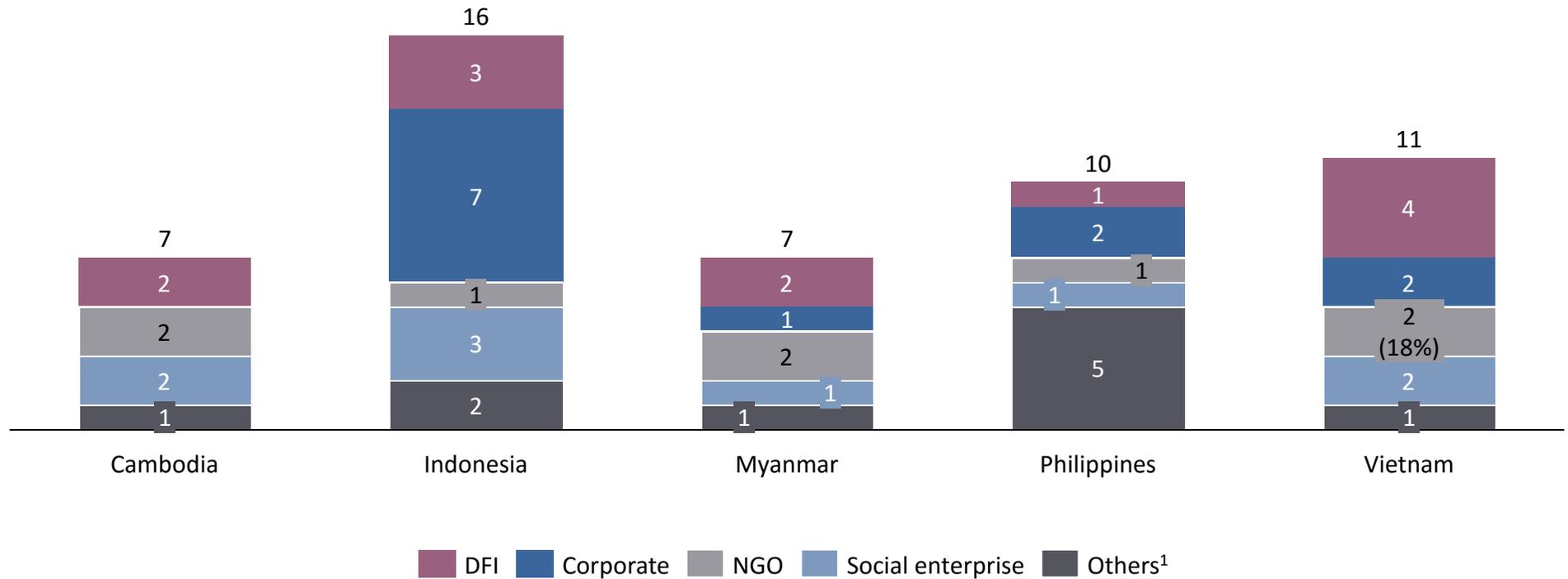
Source: Dalberg research; Dalberg analysis

Knowledge, Training & Skills (KT&S): In the absence of government KT&S programs, corporates and DFIs tend to be more active

Types of organisations providing knowledge and skills to smallholder farmer

Number of cases, n = 51

Investment into advocacy efforts to activate gov't. institutions may be an important investment to make to trigger multiplier effects on the ongoing KT&S efforts



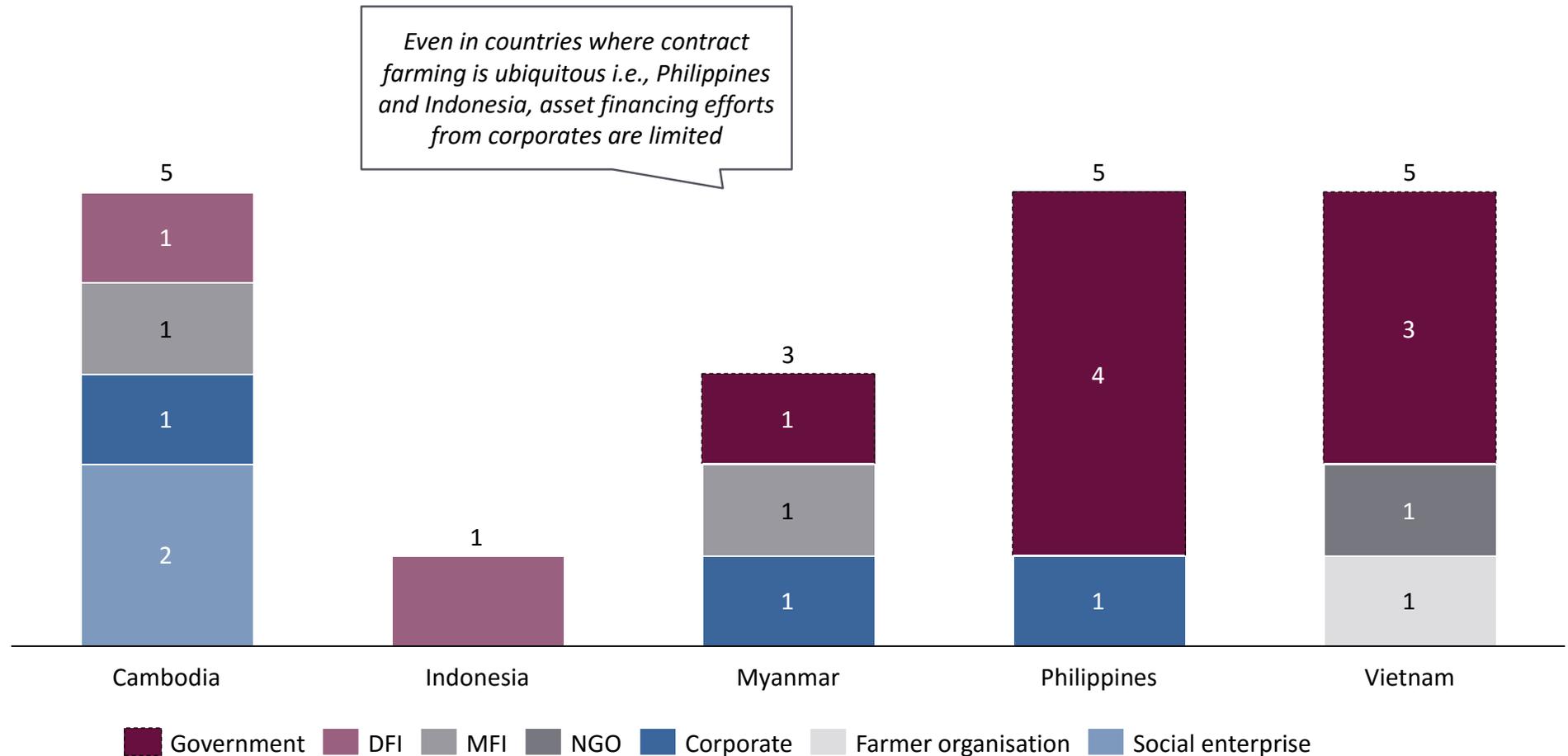
Note (1) Gov't, MFIs, Banks and Farmer organisations

Source: Dalberg research; Dalberg analysis

Equipment finance: Government institutions typically play a major role in 3 out of the 5 countries assessed

Types of organisations providing equipment financing to smallholder farmers

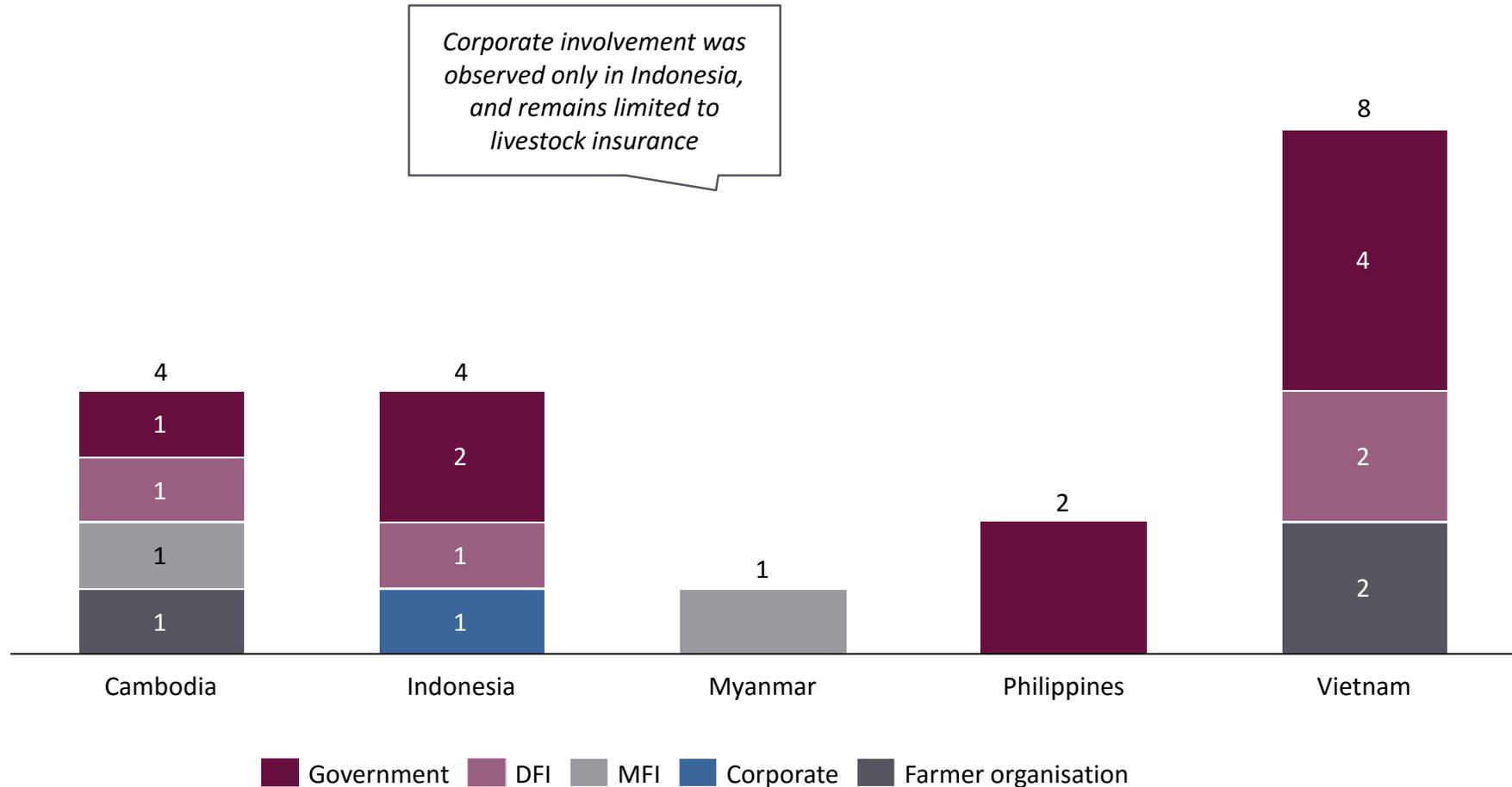
Number of cases, n = 19



Livestock: Primarily, DFIs and government institutions are active in this space with some regional variation across countries

Types of organisations providing livestock finance to smallholder farmers

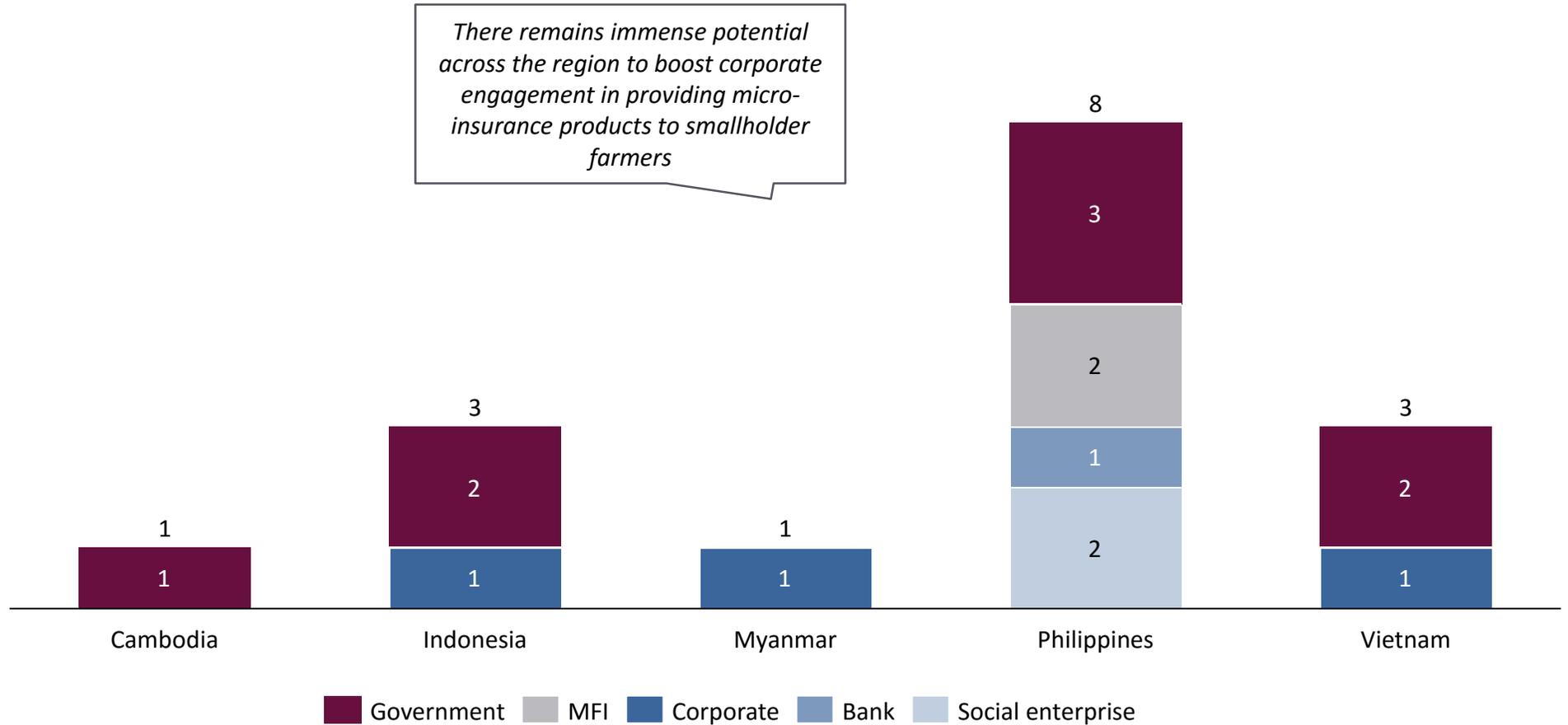
Number of cases, n = 19



Risk management: The nascent markets are led by the gov't., while Philippines, a relatively mature market, has a variety of actors

Types of organisations providing risk management products to smallholder farmers

Number of cases, n = 16

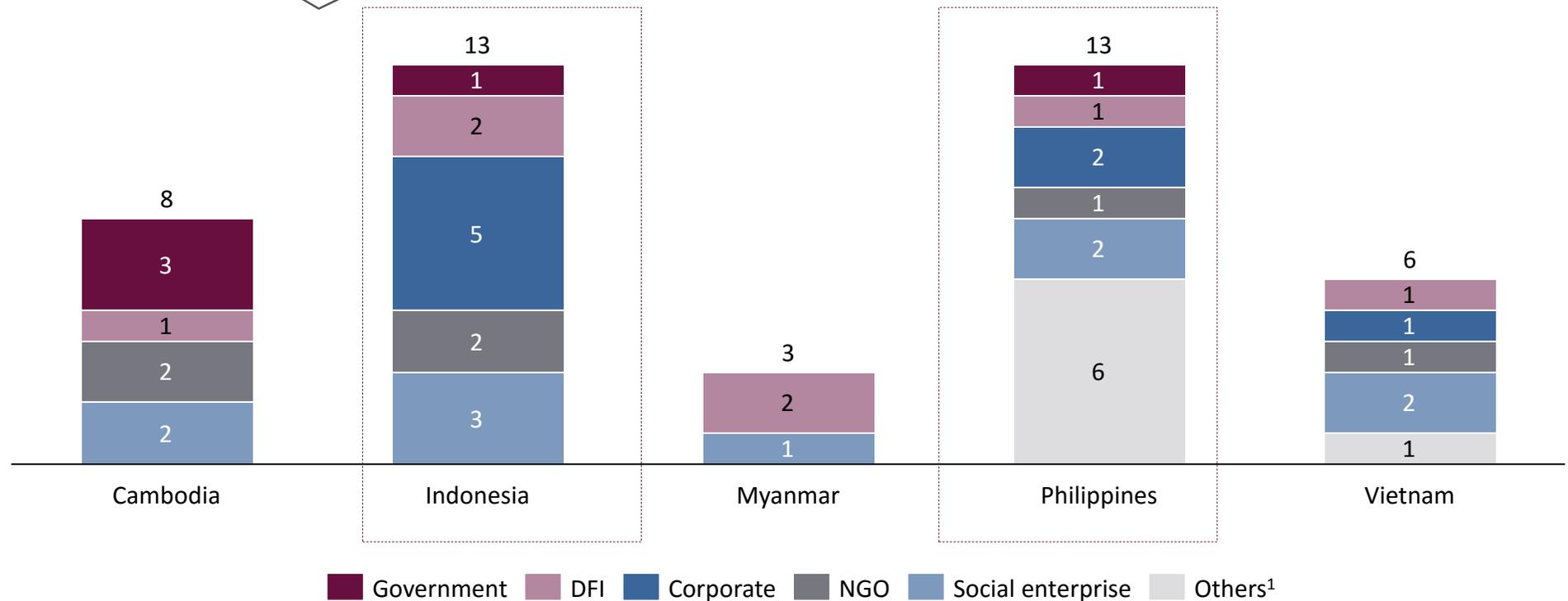


Integration into formal value chains: A variety of actors support market access, however, they are most active in Philippines and Indonesia

Types of organisations supporting farmers' integration to formal value chains

Number of cases, n = 43

Corporates play a major role through off-take agreements but their focus remains restricted to cash crops



Note: (1) Banks, MFIs and Farmer organisations

Source: Dalberg research; Dalberg analysis