



CASA

Commercial Agriculture for Smallholders and Agribusiness

**Sustainable and inclusive growth opportunities for
Cambodia's agriculture sector: Executive summary**

March 2023



Foreign, Commonwealth
& Development Office



TechnoServe
Business Solutions to Poverty®



Executive summary

Agriculture is a core contributor to Cambodia's ambitions of becoming a higher income country, but faces challenges

Cambodia needs to unlock significant agriculture investments to promote inclusive and resilient growth

Facilitating investments and assistance for processors, FIs, and agri. MSMEs through accelerators is critical to drive SHF inclusivity and climate resilience

- **Agriculture is crucial to Cambodia's ambitions of becoming an upper-middle income country by 2030 and high-income by 2050**, given the sector is ~23% of GDP and 35% of the workforce, including most in rural areas
- To achieve such ambitions, the agriculture sector needs to:
 - Drive **farmer revenues and resilience** across strategic value chains – the sector is dominated by **rice** (~40% of production), faces significant **MFI debt burden**, and is highly **susceptible to climate change** impacts
 - Evolve from agricultural production to **increasing value addition** across strategic value chains – only **10%** of outputs are **processed locally**, and **<10%** of farmers are estimated to be in formal **outgrower programs**
- **More financing is needed** to drive inclusive and sustainable growth for strategic value chains (i.e., rice, cassava, mango, cashew, vegetables, poultry, maize pepper), however **critical gaps exist**:
 - **Inclusive and resilient solutions for SHFs**: Few investments in agri. MSMEs (non-processors) with inclusive / resilient solutions (“impact-driven agri. MSMEs”) due to **lack of “investment readiness” and limited linkages**
 - **Processing**: Given **high processing costs** vs. neighboring countries, there is **limited domestic processing and investment** today, which **impacts** local processors' abilities to **enact SHF outgrower schemes**
 - **Access to affordable SHF financing**: FIs offer loans to SHF/AC at **high interest rates** and with stringent collateral requirements due to **higher risks** involved, leading to **significant SHF debt burden**
- There are three **recommended investment opportunities** to drive SHF inclusivity and climate resilience:
 - **Impact-driven agri. MSMEs (non-processors)**: **Finance** existing or new **accelerators**, and **build linkages** between accelerators, investors, and donors who provide grants
 - **Local processors**: Provide **TA to local processors** who exhibit high potential to build effective **smallholder farmer outgrower schemes** and **investor attractiveness**
 - **Financial Institutions**: Work with **FIs** to build and implement **value chain financing models** (e.g., unsecured lending, lower interest rates, etc.) that benefit smallholder farmers

Agriculture is a core contributor to Cambodia's ambitions of becoming a higher income country, but faces serious climate and inclusivity threats

Agriculture is a core contributor to national economic growth



23%

of GDP from agriculture sector

35%

of workforce employed in agriculture, largely as smallholder farmers (SHF) in rural areas

Most farmers are at risk of a debt burden, further exacerbated by the effects of climate change



up to **90%**

of farmers borrow money

up to **10%**

of GDP may be lost by 2050 due to the impacts of climate change

Limited local processing occurs today, which in turn results with few formal outgrower schemes



<10%

in formal outgrower schemes¹
















10%

agriculture outputs processed locally

1. Based on 936 farming contracts in 2020 and estimated ~200 farmers per agricultural cooperative. Data provided by 2022 Mekong Region Land Governance / CPSA study

Sources: Stakeholder interviews, Ministry of Economy and Finance, Coalition of Cambodian Farmer Communities (CCFC), Mekong Regional Land Governance, CPSA, World Bank, Open Development Cambodia, Asian Development Bank

While rice is the dominant sector, inclusive and resilient growth across other strategic value chains are required to meet Cambodia's income growth ambitions

Strategic value chain	Sector value (USD MM) ¹	% growth p.a. (2017-2021) ²	% processed locally ³	Export exposure	Est. # SHF ('000s) ⁴	Opportunity to tackle climate resilience
 Rice*	 \$2,600	9%	10%	High	~2,000	High – significant losses and reduction in quality (e.g., >50% in some regions) due to erratic rainfall and drought
 Cassava*	 \$1,200	3%	<10%	High	~200	High – due to common misuse of inputs (e.g., fertilizer), soil degradation is prevalent (>66% reduction in yields after year 3 of growing cassava)
 Mango*	 \$260	2%	<10%	High	~200 ⁵	High – significant losses and decrease in quality due to heavy unexpected rainfall impacting flowering cycles, and limited climate-resistant seeds
 Vegetables*	 \$166	>100%	–	Low	<200	High – higher temperatures can severely impact vegetable production (i.e., especially if net houses are not used to mitigate such effects)
 Maize*	 \$110	30%	20-40%	Medium	~150	Medium – significant water needs, which may be at risk if water shortages increase (e.g., 2021 drought in Pailin and Kampot)
 Pepper*	 \$91	50%	10%	High	~40	Medium – at risk of significant and continuous erratic rainfall as well as higher temp. (e.g., pepper plants can't survive 14 consecutive days of rain)
 Cashew*	 \$75	>100%	<8%	High	<150	High – significant losses and decrease in quality due to heavy unexpected rainfall impacting flowering cycles, and limited climate-resistant seeds
 Poultry	Limited data	40%	–	Low	<1,000 ⁶	Medium – risk of higher temperatures potentially leading to an increase in prevalence of poultry diseases and lower survival rates
Total / average	~\$4,500 (75% of agri. GDP)	~14%	~10%			

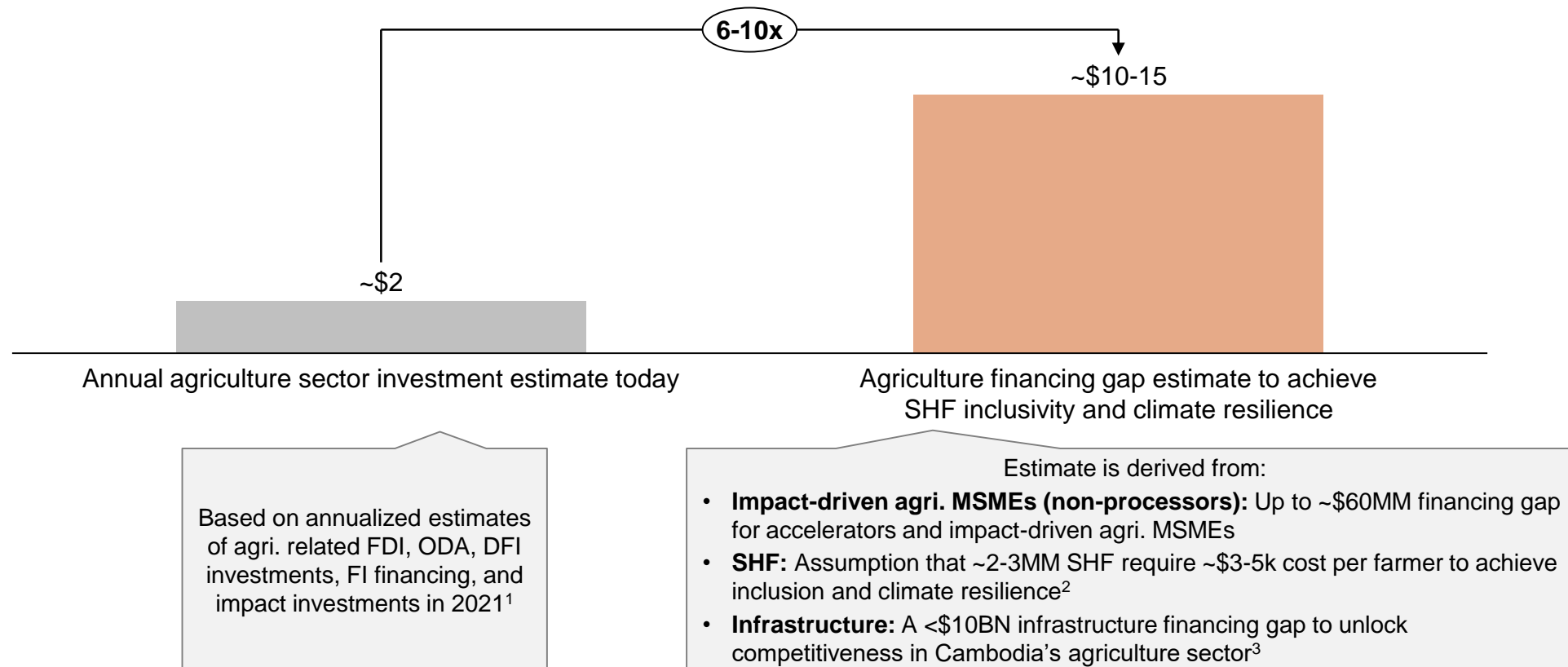
* MAFF listed as priority crop in Master Plan for Crop production by 2030

1. Based on Development of Master Plan for Crop Production in Cambodia to 2030; 2. Largely based on FAO data on quantity produced in 2017 vs. 2021; 3. Including processed by foreign companies operating in Cambodia; 4. Data represents rough, directional estimate given lack of official gov. data on # SHF. A majority of all farmers in Cambodia are SHF, which applies to value chains listed above, and farmers can grow more than one crop; 5. UN FAO 2021; 6. Primarily "backyard" small-scale farming; Sources: Stakeholder interviews, Phnom Penh Post, Asian Development Bank, National Institute of Statistics, MAFF, FAO; Note: All numbers listed above are rough estimates given data / source limitations

An estimated 6-10x the current level of annual financing is needed to achieve SHF inclusivity and climate-resilience in the agriculture sector

Estimated agriculture financing needs in Cambodia to achieve SHF inclusivity and resilience

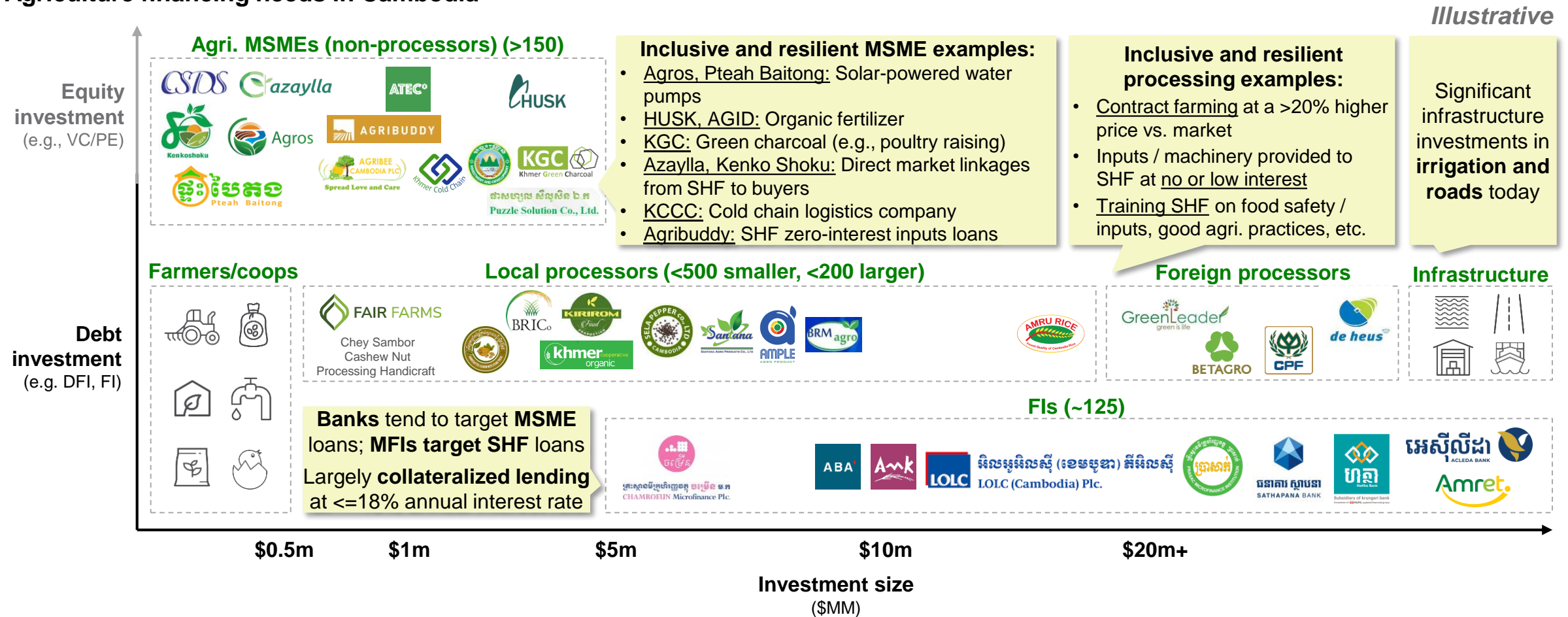
\$BN USD – estimates are rough / directional



1. NBC annual data used to estimate loans originated in 2021 for FIs, NBC and CDC data estimated to determine loans originated in 2021 for FDI, Kingdom of Cambodia's ODA database for ODA disbursement in 2021, and ADB's Cambodia's Ecosystem for Technology Startups 2019 study for local impact investors. Note that informal financing amounts are not captured above; 2. Based on CASA SHF analysis – note that SHF can achieve inclusivity and climate resilience either through outgrower schemes with processors and/or affordable FI financing; 3. Based on The Global Infrastructure Hub estimates; Source: Stakeholder interviews, CASA analysis

There are different types and sizes of investment needs across the agriculture sector to promote inclusive and climate-resilient growth

Agriculture financing needs in Cambodia



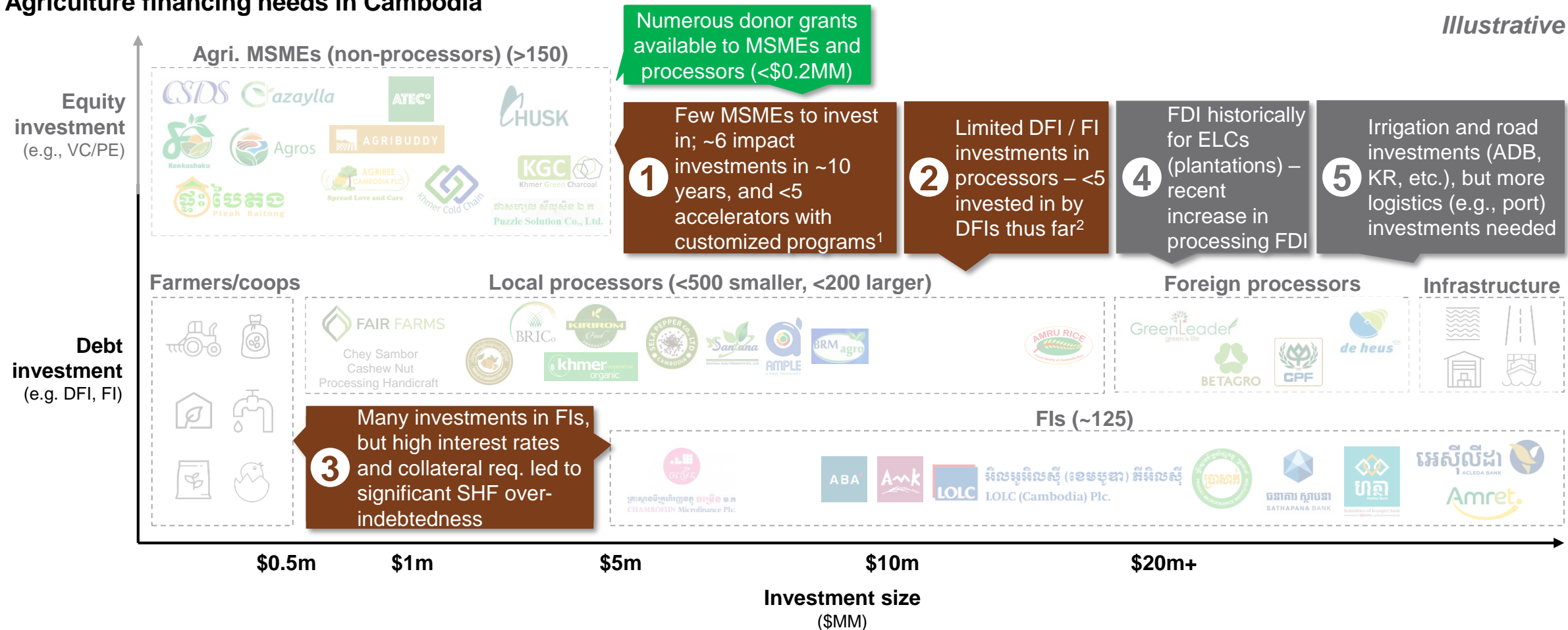
1. DFIs only invested in <5 rice processors historically, one of which went bankrupt

Note: Despite investments gaps, an observation noted by stakeholders interviewed is most agri. MSMEs appear to be run by individuals with the financial means to invest their own capital into their business

Critical investment gaps for agri. MSMEs, local processors, and FIs need to be addressed to enable smallholder farmer inclusion and climate resilience

Agriculture financing needs in Cambodia

Illustrative



1. Based on six prominent impact investors' portfolios in Cambodia and research on accelerators who offer longer-term and customized / tailored programs to MSMEs; 2. DFIs only invested in ~3 rice processors historically, one of which went bankrupt
 Note: Despite investments gaps, an observation noted by stakeholders interviewed is most agri. MSMEs appear to be run by individuals with the financial means to invest their own capital into their business

The most promising investment opportunities focus on building linkages to facilitate agri. MSME investments and supporting inclusive processor and FI models to drive SHF revenue

Key investment constraints

- Agri. MSMEs lack “**investment readiness**”, and investors lack funds to build readiness
- Lack of **connectivity** between MSMEs, accelerators, donors (i.e., grants), and investors
- Processors lack **working capital**, incl. for SHF outgrower schemes
- Increasing SHF **debt burden**, given FIs constrained to high interest rates and collateral req. due to **higher risks**
- Less interest in agri. investments given **high cost of processing**, energy, labor, logistics, etc. in Cambodia
- Past social and env. impacts with **FDI ELC¹ investments**

Opportunity	Inclusivity and resilience impact	Feasibility	Additionality
1 Agri. MSMEs (non-processors): Grow “investment readiness” and linkages	Improve SHF inclusivity, incomes, and climate resilience	Likely able to build linkages across ecosystem – \$6-60MM investment potential²	Some initiatives in place – e.g., WE4F is active but ends 2024
2 Local processors: Support processors with inclusive models and working capital	Can enact outgrower schemes that drive SHF revenue / training	Can provide strong TA expertise (e.g., CASA)	Limited TA for processors today – e.g., ADB Frontier
3 Financial institutions: Support FIs on more affordable SHF loan models	Potential to lower SHF debt with innovative models	Requires collaboration and TA on risk mgmt. with FI – \$60-190MM investment potential³	Past initiatives (e.g., USAID with AMK ⁴); more support needed
4 Foreign processors: Support FDI transition to processing facilities	Can enact outgrower schemes that drive SHF revenue / training (w/o ELC)	Requires coordination between foreign firms and government	Existing growing trend towards FDI for processing facilities
5 Infrastructure: Promote increase in infrastructure investments	Upgraded infra. could drive competitiveness of sector, bringing more SHF revenue	More challenging to facilitate high ticket size investments	Several investors (ADB, CN, FR, etc.); less logistics infra.

■ Priority ■ For exploration

1. Economic Land Concessions, which typically include a plantation and processing facility owned by a foreign firm. Example social and env. impacts include reports of land conflicts and dispossession from farmers, deforestation, price volatility for farmers, etc.; 2. Based on impact investor ranges and stakeholder interviews; assuming ~50 businesses to invest in; 3. Based on past DFI investments; assuming <20 FIs to invest in at \$10-15MM each; 4. USAID supported AMK with developing a value chain financing model; Source: Stakeholder interviews

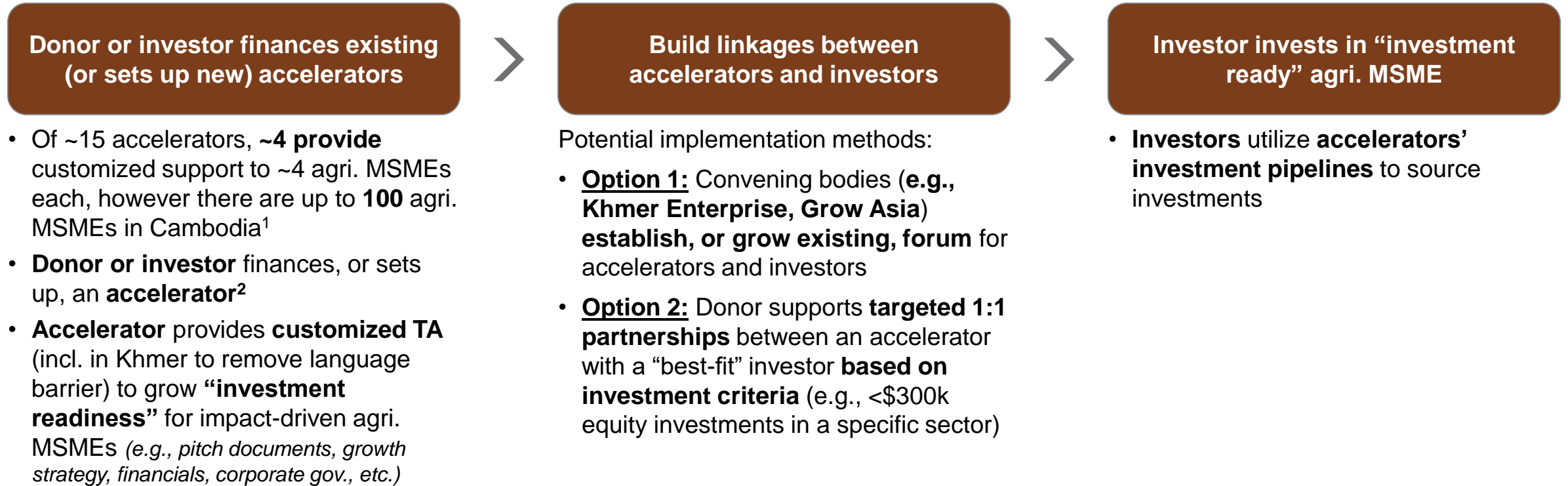
Recommend prioritizing the development of “investment readiness” for impact-driven agri. MSMEs, best-practice processor outgrower schemes, and innovative FI models for SHF



Opportunity	Recommendation	Key stakeholders	Fact base and case studies
<p>Agri. MSMEs (non-processors):</p> <p>1 Grow “investment readiness” and linkages</p>	<p>Finance existing/new customized accelerators</p> <p>Build linkages between accelerators, investors, and donors who provide grants</p>	Impact-driven agri. MSMEs, donors, NGOs, accelerators, investors, government	<ul style="list-style-type: none"> MSME business profiles Options for financing and linkages Case studies: Platform Impact, WE4F, Agros, HUSK
<p>Processors:</p> <p>2 Support processors with inclusive models and working capital</p>	Provide TA to local processors who exhibit high potential to build effective outgrower schemes and investor attractiveness	Processors, donors (e.g., CASA), DFIs, FIs	<ul style="list-style-type: none"> Potential financing options Contract farming deep dive Case studies: AMRU, BRM Agro, HCST, AMPLE Agro, KOC
<p>Financial institutions:</p> <p>3 Support FIs on more affordable SHF loan models</p>	Work with FIs to build and implement value chain financing models (e.g., unsecured lending, lower interest rates, etc.)	FIs, donors, DFIs	<ul style="list-style-type: none"> Current situation of SHF lending Value chain financing model Case study: AMK, AC
<p>Foreign processors:</p> <p>4 Support FDI transition to processing facilities</p>	<i>Raise awareness of <u>processing facility investment opportunities</u></i>	<i>Foreign processing firms, donor (e.g., DBT), government</i>	<ul style="list-style-type: none"> <i>Past foreign investments</i> <i>Case studies: CPF, Hyundai, Green Leader</i>
<p>Infrastructure:</p> <p>5 Promote increase in infra. investments</p>	<i>Promote investments in <u>logistics infrastructure projects with DFIs</u></i>	<i>DFIs, government</i>	<ul style="list-style-type: none"> <i>Past infrastructure investments</i>

■ Priority ■ For exploration

1 Deep dive: “Investment readiness” support needs to be provided to impact-driven agri. MSMEs via customized accelerator programs that are connected to prospective investors

Recommended approach



<p>Examples</p>	 <p>USAID, BMZ, etc. set up Water Energy for Food program from 2019-2024 that provides grants and TA / investment readiness for 4 impact-driven agri. MSMEs (e.g., ATEC, Agros)</p>	 <p>With support from Oxfam and Khmer Enterprise, Platform Impact/PRISME accelerator provides investors (e.g., Insitor) with deal information on impact-driven agri. MSMEs its working with to build “investment readiness”</p>
------------------------	--	--

1. “Customized” support is defined as longer-term support tailored to a specific MSME (vs. group trainings). Note that the ~100 agri. MSMEs does not count for whether the business is “impact-driven” or not; 2. An NGO may support the donor in setting up an accelerator; Sources: Stakeholder interviews, Water Energy for Food Programme, Development Asia

2 Deep dive: Technical assistance is needed to develop local processors' inclusive and climate-resilient business models to attract more investments and benefit SHF

Example processors¹ (*non-exhaustive*)



Leading rice (incl. organic), cassava, etc. producer with contract farming, regenerative agri., etc.; received **many private investments and TA** (e.g., IFC, FMO/DFCD, USAID, Ex-Im Bank, EMIA, etc.)



Rice (incl. organic) producer with **zero-interest SHF loans, climate-resilient seed testing, contract farming, etc.**; has <\$2MM USAID partnership, seeking **~\$7MM investment**



Cashew (incl. organic), mango, pepper, etc. processor that sells SHF inputs, runs **contract farming, training, etc.** and has buyers asking for more production; seeking **~\$6MM investment**



Emerging cashew (incl. organic) processor with pre-harvest **zero-interest SHF loans, >25% higher price on contract farming, 80% female staff, etc.** and has buyer asking for more production; seeking **~\$3MM investment**

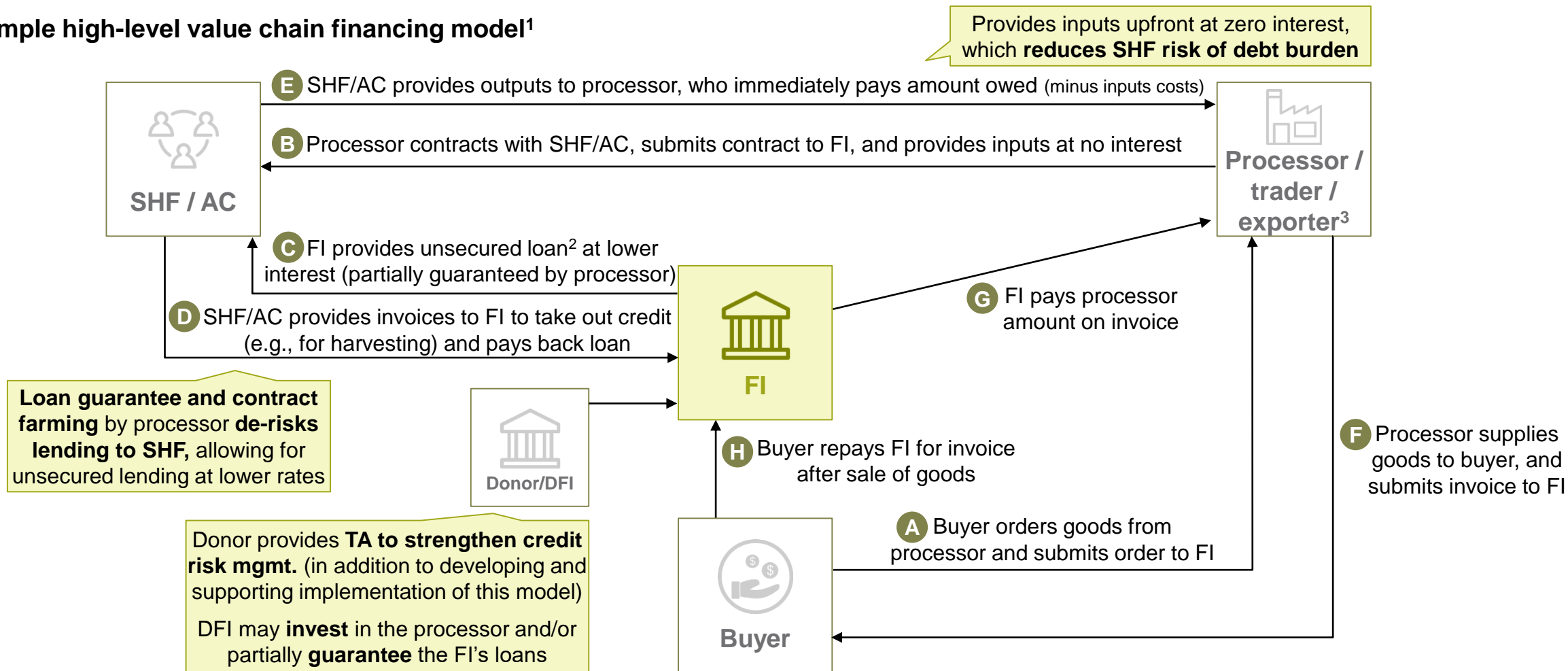
Recommended approach for donor programs (e.g., CASA)

- Of the <500 smaller and <200 larger processors² in Cambodia today, **identify processors** who exhibit strong demand from buyers, interest in building inclusive and climate-resilient models for SHF, business integrity standards, etc.
- **Provide TA** to identified processors to build or enhance existing **outgrower schemes with SHF and climate-resilient practices**, such as:
 - Holistic outgrower financing (e.g., pre-financing inputs at no interest)
 - Enhanced focus on gender inclusivity (e.g., female contract holders)
 - Data analysis and metrics reporting on inclusivity and resilience
 - ...
- Develop **robust cases for processor investment** given models of inclusivity and resilience (e.g., pitch deck, supporting analysis, etc.)
- **Facilitate investments**, particularly **working capital**, in such processors from **DFIs and FIs** (e.g., connect processors to investors)

1.Note: Contract farming listed in above examples is often through agricultural cooperatives;2. Estimates for this study's strategic value chains and based on stakeholder interviews, CRF, CAC, Phnom Penh Post, etc.; Sources: Stakeholder interviews, AMRU Rice, BRM Agro, AMPLE Agro, HCST, Grow Asia, USAID, Ex-Im Bank, IFC, SNV

3 Deep dive: Lending to players across an end-to-end value chain can mitigate risks and build creditworthiness, which results with more affordable loans to SHFs / ACs

Example high-level value chain financing model¹



1. Note that traders and other potential players in the value chain were not shown in the above diagram for simplicity. In addition, this is one of many possible value chain financing mechanisms; 2. Another alternative is to provide a warehousing financing receipt as collateral (e.g., use farmers' machinery or stored crop outputs as collateral); 3. Ideally the processor would enact contract farming, however a majority of outputs are currently informally traded to neighboring countries, so SHF may also contract with such traders / exporters

Supported by:



Implementing partners:

