ValueLinks Module 8

VC FINANCE
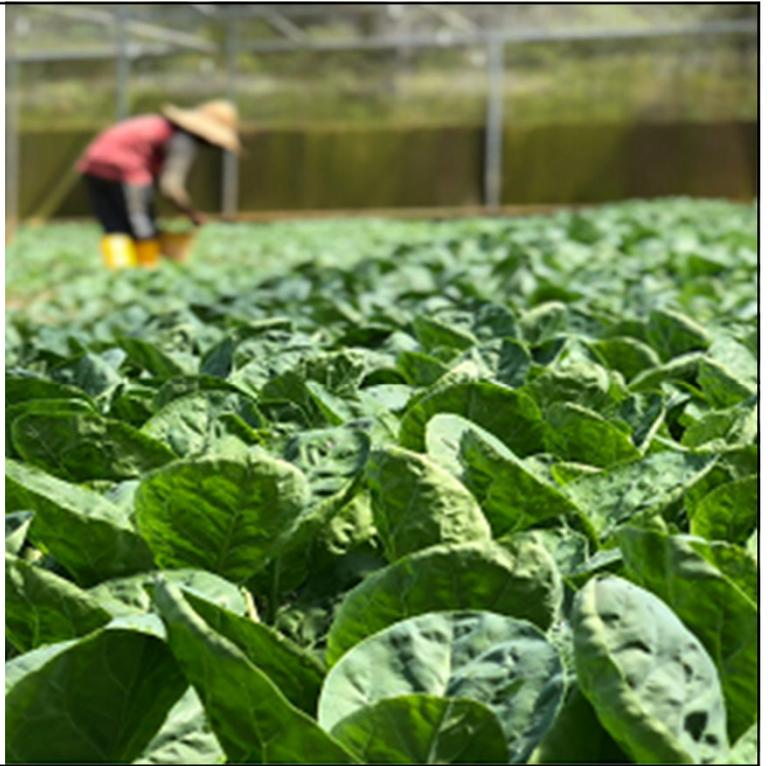
STRUCTURE OF VALUELINKS 2.0
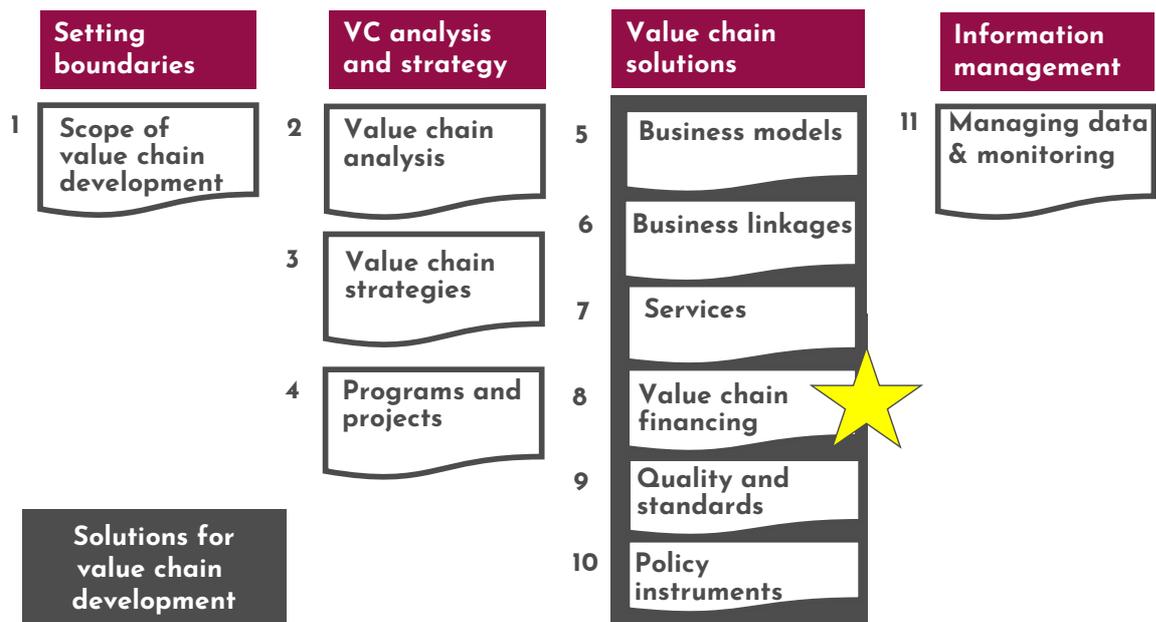
Setting boundaries		VC analysis and strategy		Value chain solutions		Information management	
1	Scope of value chain development	2	Value chain analysis	5	Business models	11	Managing data & monitoring
		3	Value chain strategies	6	Business linkages		
				7	Services		
		4	Programs and projects	8	Value chain financing		
				9	Quality and standards		
Solutions for value chain development				10	Policy instruments		

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MODULE 7

01

FINANCING NEEDS OF VALUE CHAINS AND VCD

02

FINANCING SOLUTIONS

03

RISK MANAGEMENT

FINANCING NEEDS OF VALUE CHAIN DEVELOPMENT

Classifying the financing needs arising in VC development

|		
LT capital (fixed assets) ST working capital *of operators*	Funds for *building cooperatives vocational training*	Primary Producers → Industry → Traders
LT capital (fixed assets) ST working capital *of service providers*	Funds for *associations staff training*	Support Service Providers
Rural infrastructure *(from resource management to communications)*	Funds for *improvement of organization and staff training*	Government (national or regional)

FINANCIAL NEEDS OF VC ACTORS

Typical financing needs of operator business models

| Primary producers | $\dashrightarrow$ | Processors Industry | $\dashrightarrow$ | Traders | $\rightarrow$ | Market |
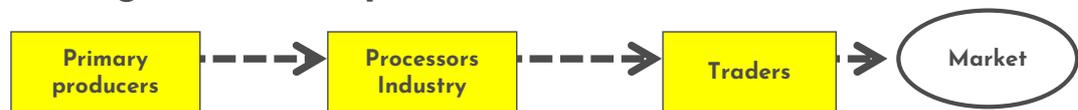
	Primary producers	Processors Industry	Traders
Short term working capital *2-6 months*	Bridging the period between - purchase of inputs and sale of harvest - delivery of buyers	Bridging the period between - purchase of intermediate products and sale of pruduct - delivery of products and payment of buyers	Bridging the period between - purchase (in bulk) and retail (store value) - Export of product and payment of overseas buyers
Mid & Long term fixed assets *2-5 years*	Investment into - tree plantation - greenhouse - storage space - equipment, machinery	Investment into - buildings - equipment, machinery	Investment into - buildings - vehicles

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MODULE 7

01
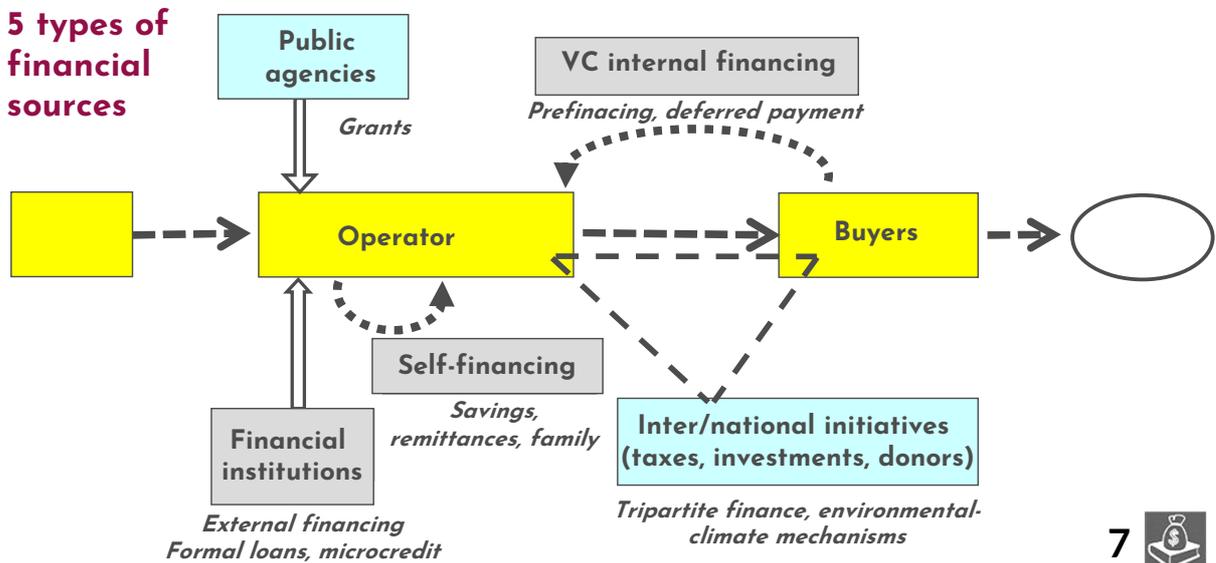
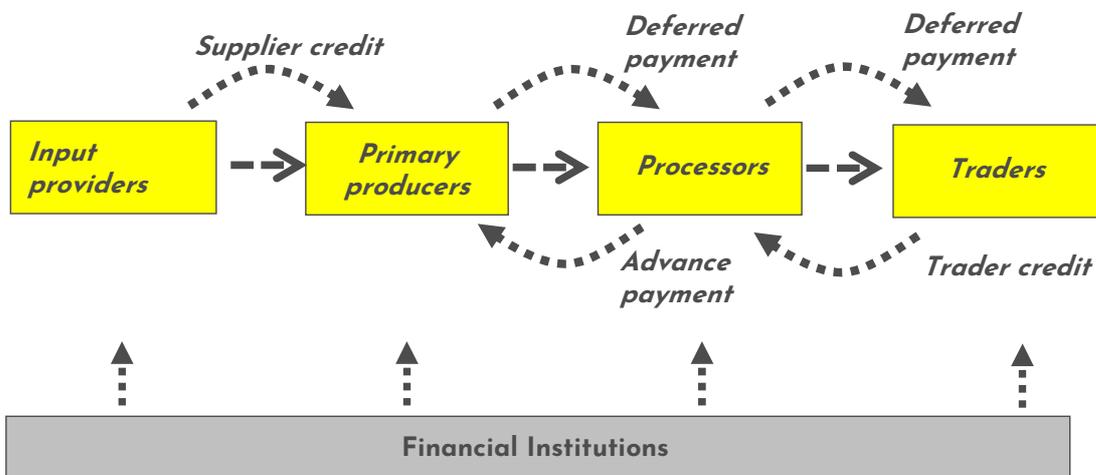FINANCING NEEDS OF VALUE CHAINS AND VCD

02

FINANCING SOLUTIONS

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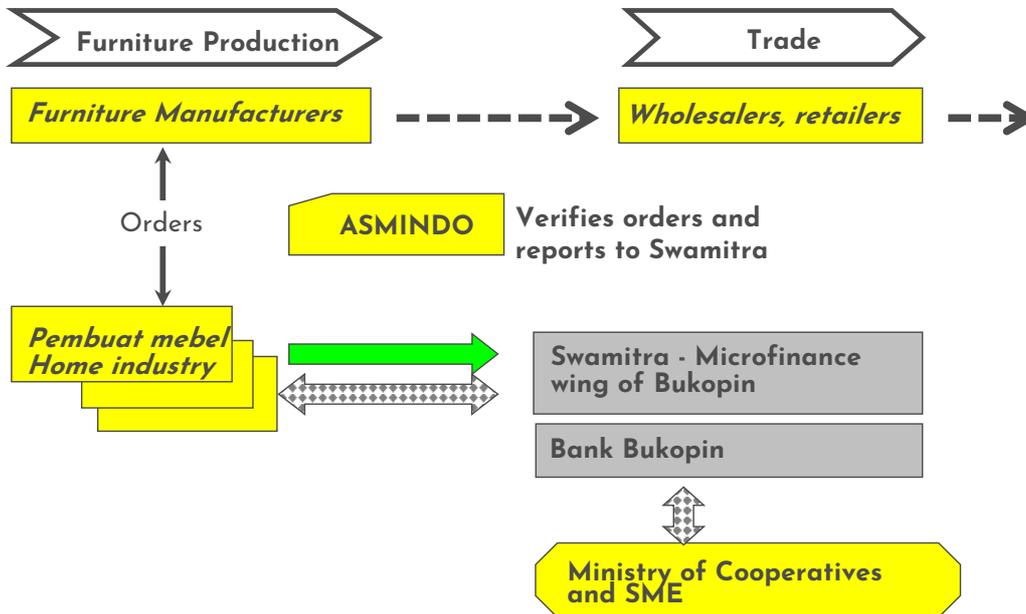
RISK MANAGEMENT

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FINANCIAL SOURCES OF VC OPERATORS

5 types of financial sources

Public agencies

Grants

VC internal financing

Prefinacing, deferred payment

Operator

Buyers

Self-financing

Savings, remittances, family

Financial institutions

External financing
Formal loans, microcredit

Inter/national initiatives (taxes, investments, donors)

Tripartite finance, environmental-climate mechanisms

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VC-INTERNAL FINANCING ARRANGEMENTS

Internal / external value chain financing

Supplier credit

Deferred payment

Deferred payment

Input providers

Primary producers

Processors

Traders

Advance payment

Trader credit

Financial Institutions

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TRIPARTITE FINANCE

Furniture Production

Trade

Furniture Manufacturers → Wholesalers, retailers

Orders

ASMINDO — Verifies orders and reports to Swamitra

Pembuat mebel
Home industry

Swamitra - Microfinance wing of Bukopin

Bank Bukopin

Ministry of Cooperatives and SME

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FINANCEMENT TRIPARTITE – TRUCK LEASING

FIGURE B2.4.1 Financing Model for Farmer Cooperatives in Côte d'Ivoire

Deal structure at a glance

1st loss (10% on IFC portion)

Cargill pays back debt service before it pays the farmers

Cocoa delivery / offtake

Risk-sharing agreement

SIB (bank)

Truck leasing

Coops (borrowers)

Cargill (sponsor)

IFC

Advisory services

2nd loss (up to 25% on IFC portion)

Portfolio (up to CFAF, 3.5 billion)
Risk distribution

Portfolio losses

SIB

IFC

GAFSP — Up to 25%

Cargill — 10%

GAFSP

Cocoa collection

Farmers

- Top 100 "partner" coops out of 500 coops with which Cargill is working
- Cargill already provides working capital financing, and track record is good

One of the top cocoa exporters in Côte d'Ivoire, with 15-16% market share
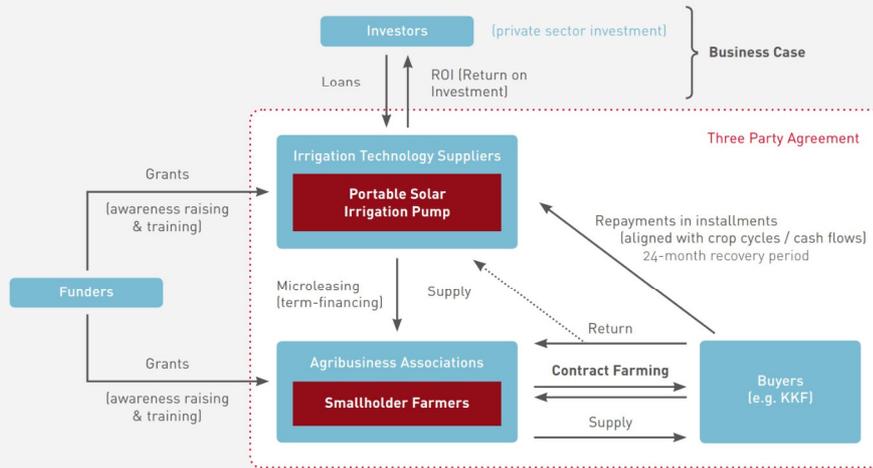
Source: IFC 2017, https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/impact-stories/affordable-credit-for-ivoirian-cocoa-co-ops.
Note: GAFSP = Global Agriculture and Food Security Program; IFC = International Finance Corporation; SIB = Société Ivoirienne de Banque (Ivorian Bank Corporation).
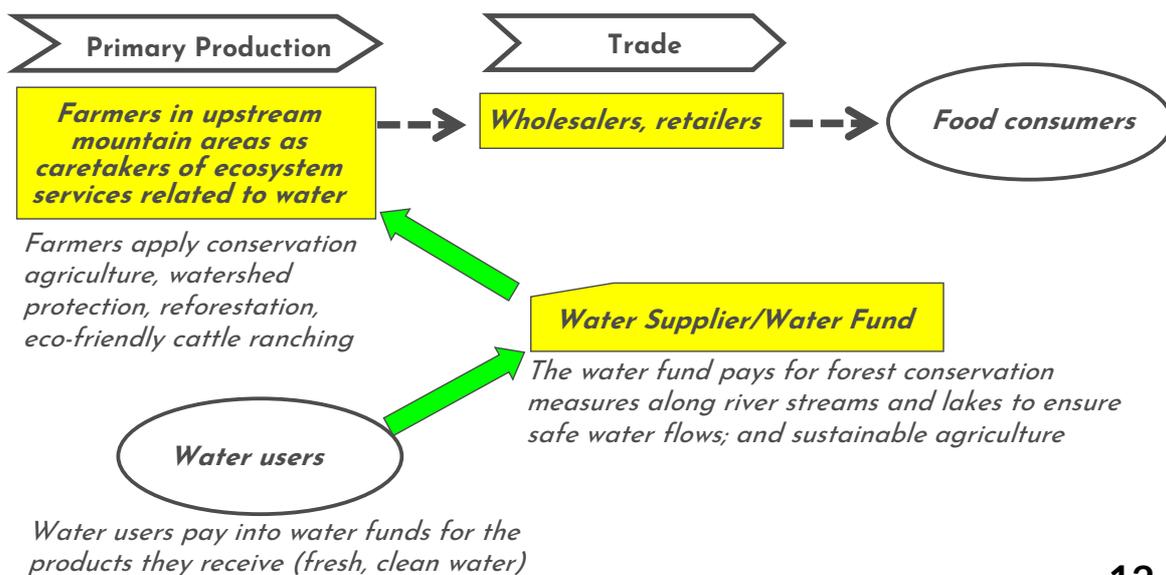
TRIPARTITE LEASING ARRANGEMENTS

FIGURE 4

Product design of Irrigation System Microleasing for High-Value Crops

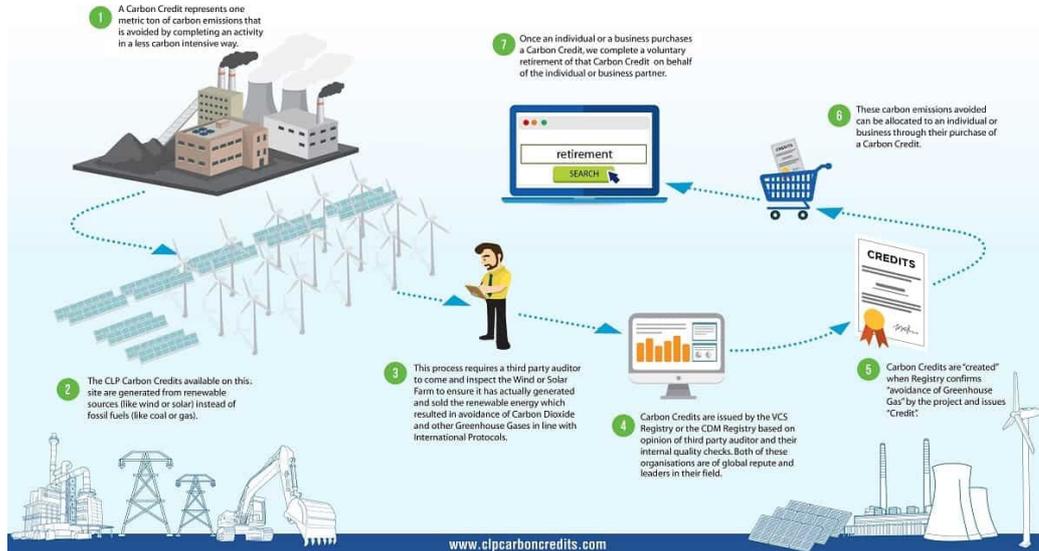**Source:** BOTTOM-UP INNOVATION FOR ADAPTATION FINANCING

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PAYMENTS FOR ECOSYSTEM SERVICES – WATER FUND

Primary Production

Trade

Farmers in upstream mountain areas as caretakers of ecosystem services related to water

Wholesalers, retailers

Food consumers

Farmers apply conservation agriculture, watershed protection, reforestation, eco-friendly cattle ranching

Water Supplier/Water Fund

The water fund pays for forest conservation measures along river streams and lakes to ensure safe water flows; and sustainable agriculture

Water users

Water users pay into water funds for the products they receive (fresh, clean water)

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CARBON CREDIT TRADE

CARBON FINANCING SCHEMES

Carbon credit trading platforms: Acorn (Rabobank), FCF etc	• Some funds have pro-smallholder focus, but extensive baseline and monitoring required to proof real emission reduction and limited flow back to smallholders
Carbon farming	▪ Voluntary carbon credits markets are an option for carbon farming ▪ Quite long and costly process as farmers have to be visited, GPS points taken, trees measured, calculations handed in ▪ Payments for CO2 emissions are rather low (10-30 €/ton), not offering reasonable side income yet. ▪ Recent research in Kenya (2020) indicated an annual mean carbon revenue of 0.33 $ per household and year only ▪ The potential to mitigate GHG emissions by reforestation/afforestation is almost double the potential by agriculture.

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MODULE 7

01

FINANCING NEEDS OF VALUE
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RISK MANAGEMENT

RISKS ALONG AGRICULTURAL VALUE CHAINS

Weather risks	Periodic deficit and or excess rainfall or temperature, hail, storms
Natural disasters	Floods and droughts, hurricanes, earthquakes and volcanic activity
Biological risks	Crop and livestock pests and diseases, food contamination
Market risks	Supply, demand, price changes, changes of quality and food safety requirements
Infrastructure risks	Degraded transport, communication, energy infrastructure
Management risks	Poor quality control, forecast and planning errors, use of outdated seeds
Institutional risks	Changing monetary and tax policies, uncertain legal policies, weak institutional capacity
Political risks	Security-related risks, national or international political and social instability

RISK MANAGEMENT INSTRUMENTS

- Technology development and adoption (R&D, postharvest technology, software development, IT, education programs)
- Enterprise management practices (e.g. farm diversification, certification, Just-in-time management, inventory control, food safety practices, logistics planning, early warning systems)
- Financial instruments (e.g. credit, insurance, warehouse financing)
- Investment in infrastructure (e.g. transport / communication, energy, informatics and knowledge transfer, storage and handling, processing facilities, weather stations)
- Policy and public programs (regulatory measures, agricultural policies, property rights, labor laws, disaster management, safety nets)
- Private collective action (action by cooperatives, industry associations)

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WEATHER INDEX-BASED INSURANCE

General	Introduced in agricultural VCs in cooperation with insurance companies that are interested in offering a particular product
Mobile-Enabled Microinsurance	Agriculture insurance for smallholder farmers using mobile technology and pay-outs based on reliable weather indexing rather than proof of actual losses targeting commercial crop VCs
Public support	In Cambodia, rice farmers buy an insurance of 10$ to receive a maximum support of 100$, but only pay 5$ as the government contributes 5$
Recomman-dations	A combination with contract farming can be of advantage where the offtaker buys an insurance package and includes the cost in the contract farming scheme. Or to promote the insurance via a cooperative model or included in a sustainability standard. Some projects recommend using the open source weather information software CHIRPS for measuring damage, whereas automatic or manual rain gauge is more expensive Good potential is seen as well for livestock insurances

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