



Making sense  
of Public–Private  
Partnerships



PPPLab B4 Study:

Business Models in Food & Water PPPs

First findings of 2012 FDOV & FDW project proposals



# Objectives & Methodology of the study

## Objectives

Generate lessons learned about the business models of the PPPs and their financial strategies

- Aim for inclusiveness
- Role of the business case in the PPP
- Risk analysis & allocation

## Methodology

Quick scan of all 42 project proposals (29 FDOV and 13 FDW)

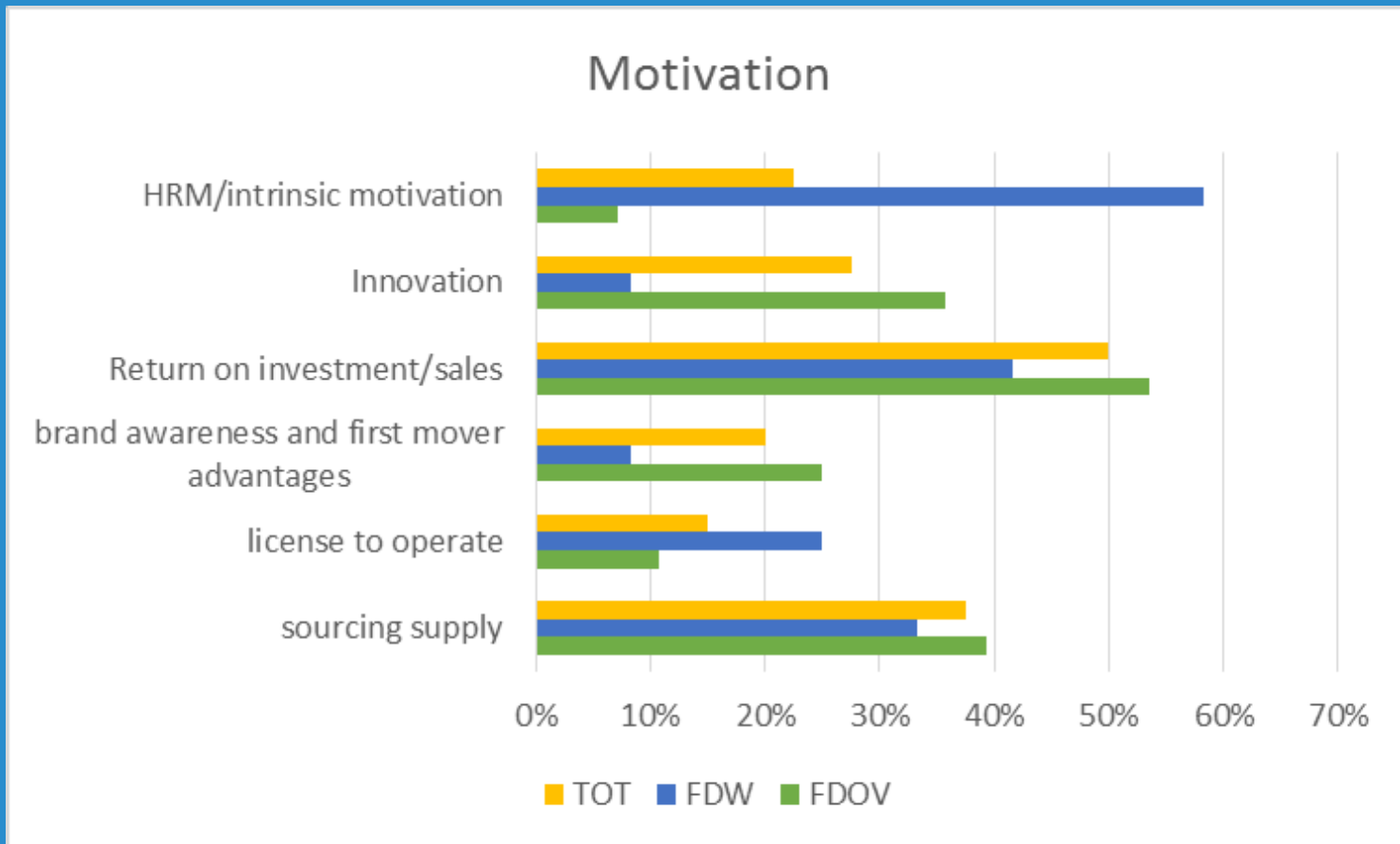
- Motivation & type of activities
- Relation between project and underlying business
- Inclusiveness of the business model

Business Model Generation Methodology adapted for PPPs in development sector

Review of risk profiles of PPPs



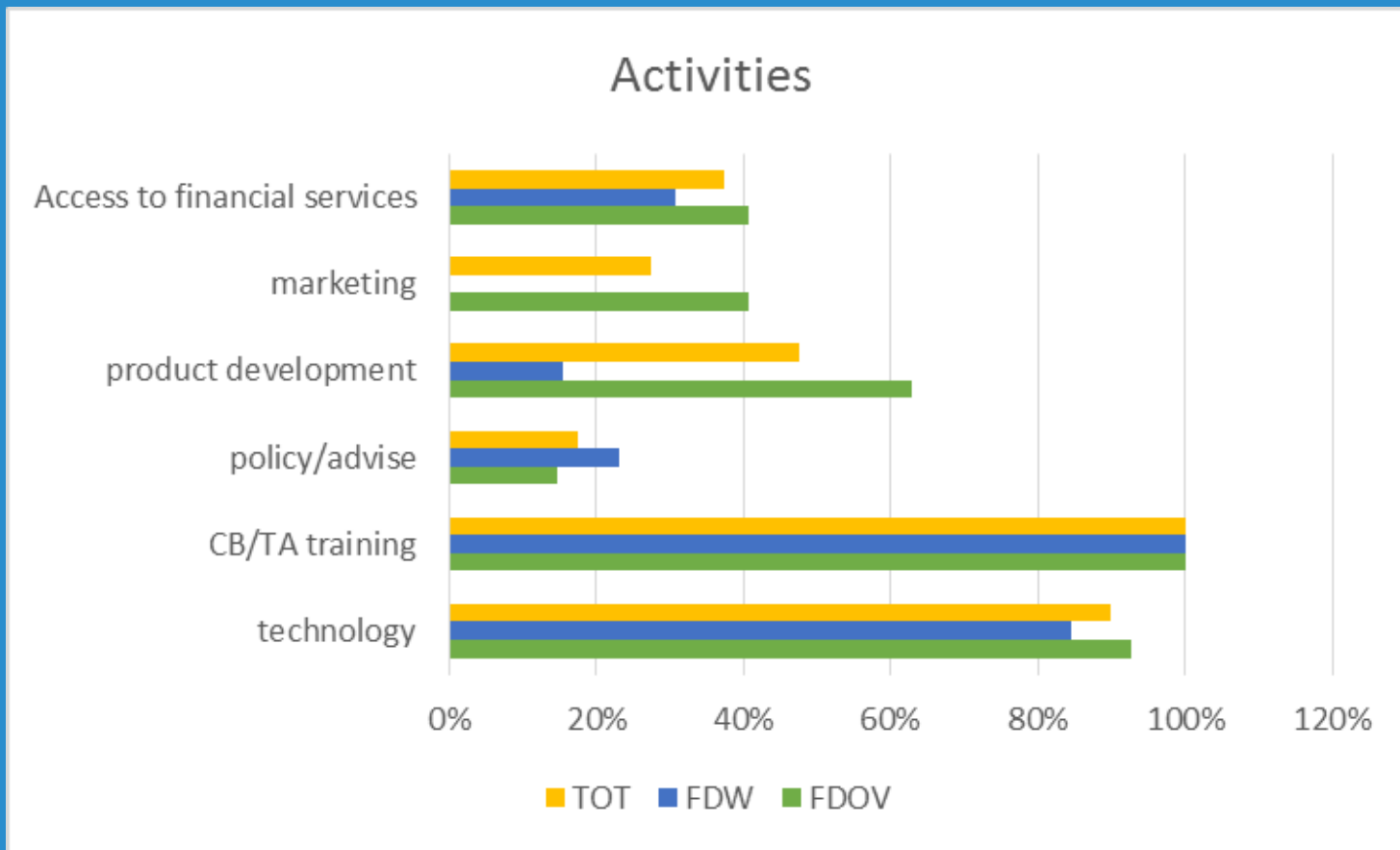
## Quick Scan findings Motivation of main partner





## Quick Scan findings

### Type of activities of the PPPs





## Quick Scan findings

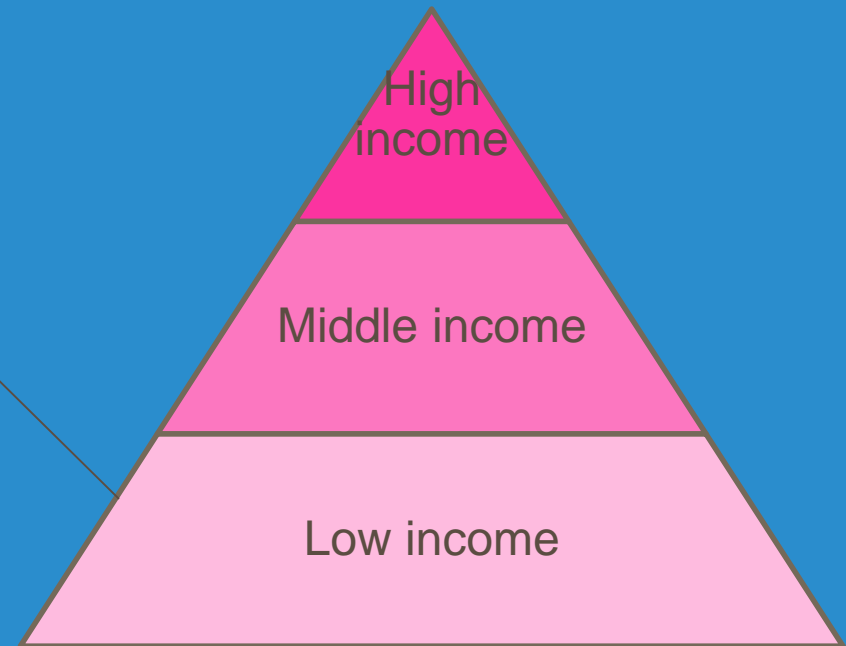
### Partners, their motivations and types of activities

- Only half of the PPPs specifically aim to generate return on investment
- Much more innovation in FDOV than FDW
- HRM/ Intrinsic motivation strong driver in FDW (Dutch water utilities)
- Strong emphasis on training/ capacity building an technology
- Much less for marketing and policy/ advise



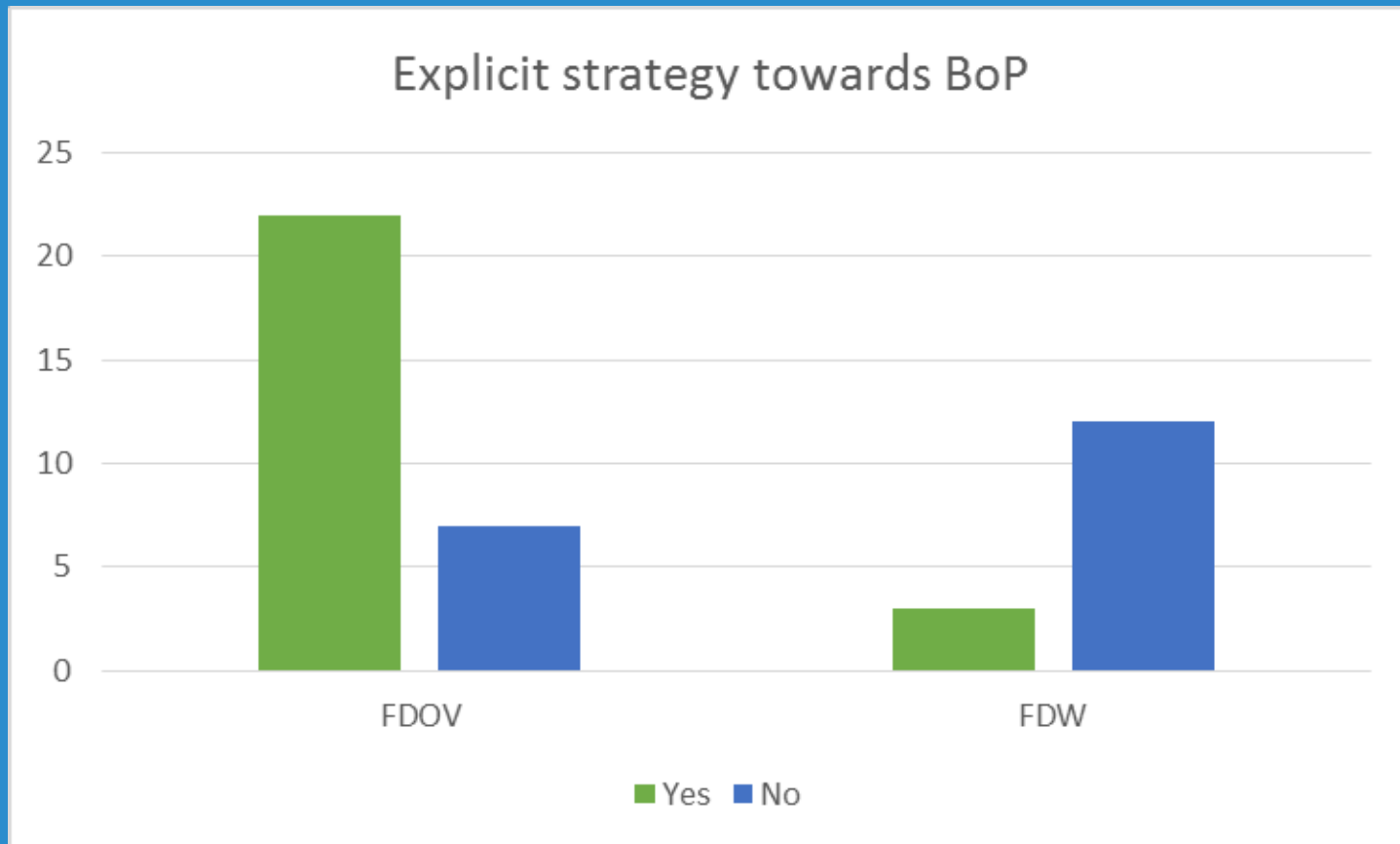
## Inclusiveness of the BoP

- Is the leading private sector having a strategy for this group?
- Which sub-category of low-income groups?
- How are they integrated in your business operation?
- Are local SME involved?





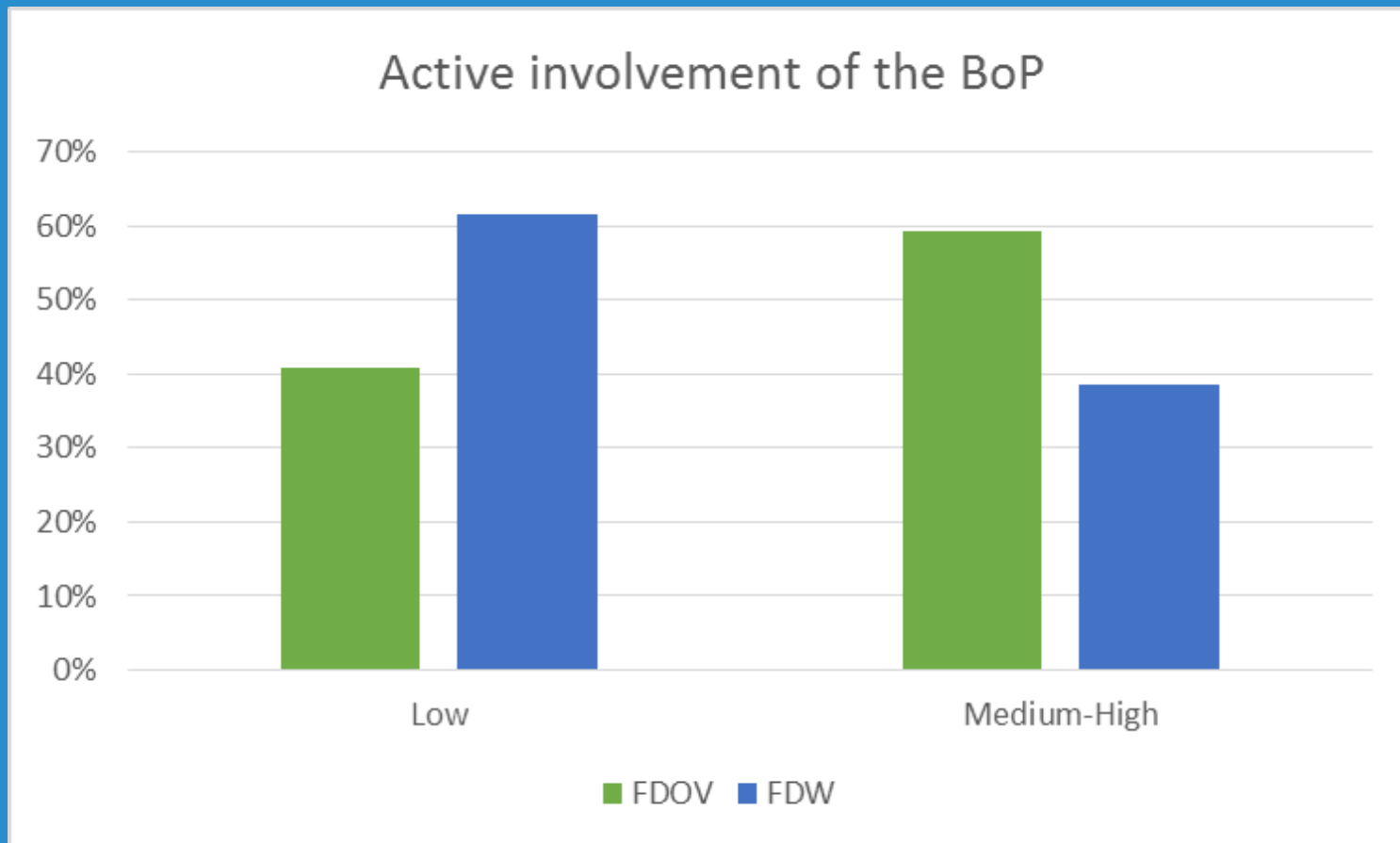
## Quick Scan findings Explicit strategy towards BoP







## Quick Scan findings Active involvement of the BoP





## Quick Scan findings

### Position of the business case in the PPPs

Three types identified:

1. The project = the business case.  
(7 FDOV, 6 FDW)
2. The PPP initiates and/or supports multiple business cases.  
(10 FDOV, 1 FDW)
3. The PPP supports a far larger business case of one of the partners .  
(14 FDOV, 6 FDW)



## Relations between the projects and business models



FDOV12BI01  
 FDOV12ET06  
 FDOV12GH01  
 FDOV12KE01  
 FDOV12KE09  
 FDOV12RW04  
 FDOV12KE02

FDW12GH06  
 FDW12KE03  
 FDW12OT01  
 FDW12SA01  
 FDW12SL01  
 FDW12TZ02

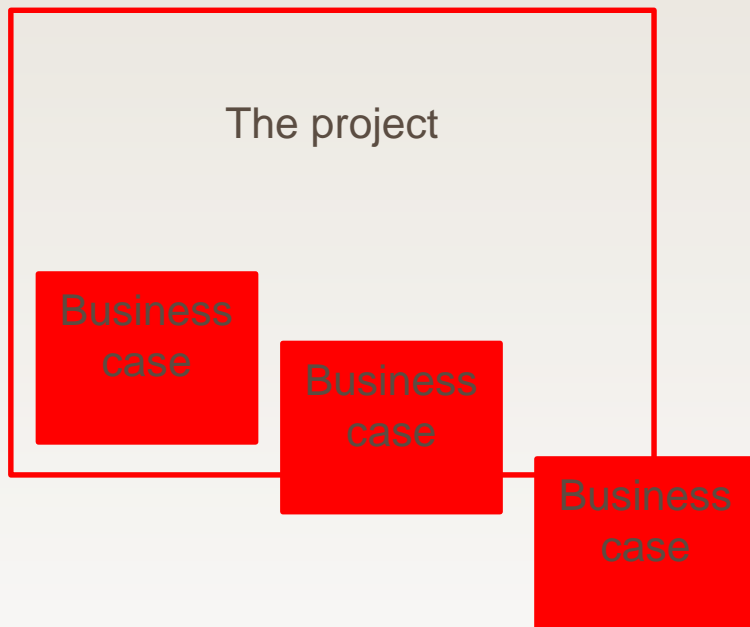
7

6

The project = the business case



## Relations between the projects and business models



- FDOV12KE03
- FDOV12KE06
- FDOV12KE04
- FDOV12ML01
- FDOV12MZ04
- FDOV12TZ01
- FDOV12TZ03
- FDOV12TZ04
- FDOV12PH01
- FDOV12KE02

FDW12ET06

The project supports or initiates multiple business cases

10

1



## Relations between the projects and business models

The project

The project supports a (far) larger business case of 1 or more of the partners

The Business case

FDOV12CG01

FDOV12MW01

FDW12CO01

FDOV12CO03

FDOV12NI01

FDW12ET03

FDOV12ET01

FDOV12RW02

FDW12GH02

FDOV12ET05

FDOV12RW04

FDW12MW01

FDOV12ET09

FDOV12SA03

FDW12RW01

FDOV12GH07

FDOV12VN03

FDW12BD03

FDOV12RI07

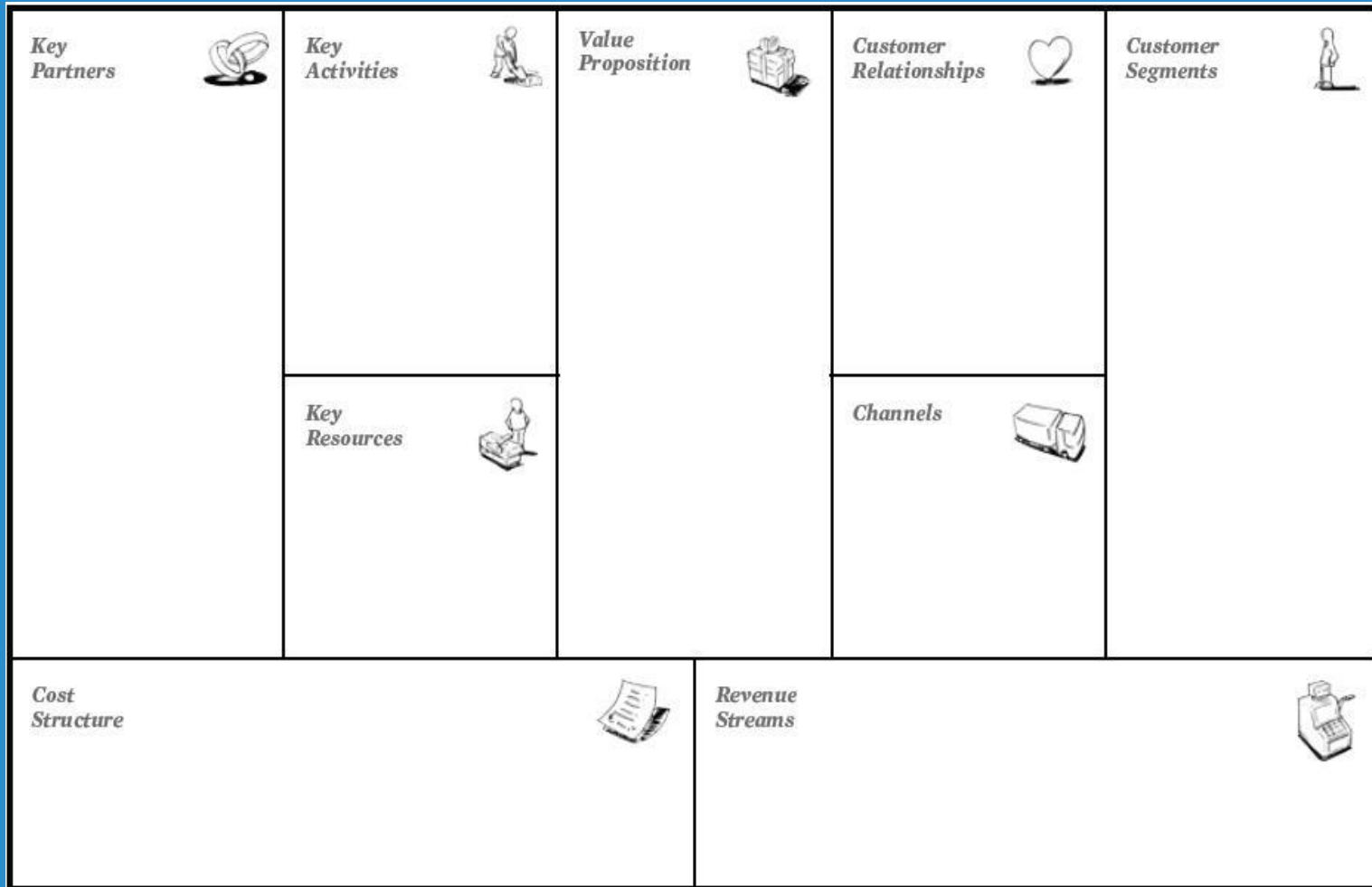
FDOV12VN05

14

6



# Business Model Generation methodology





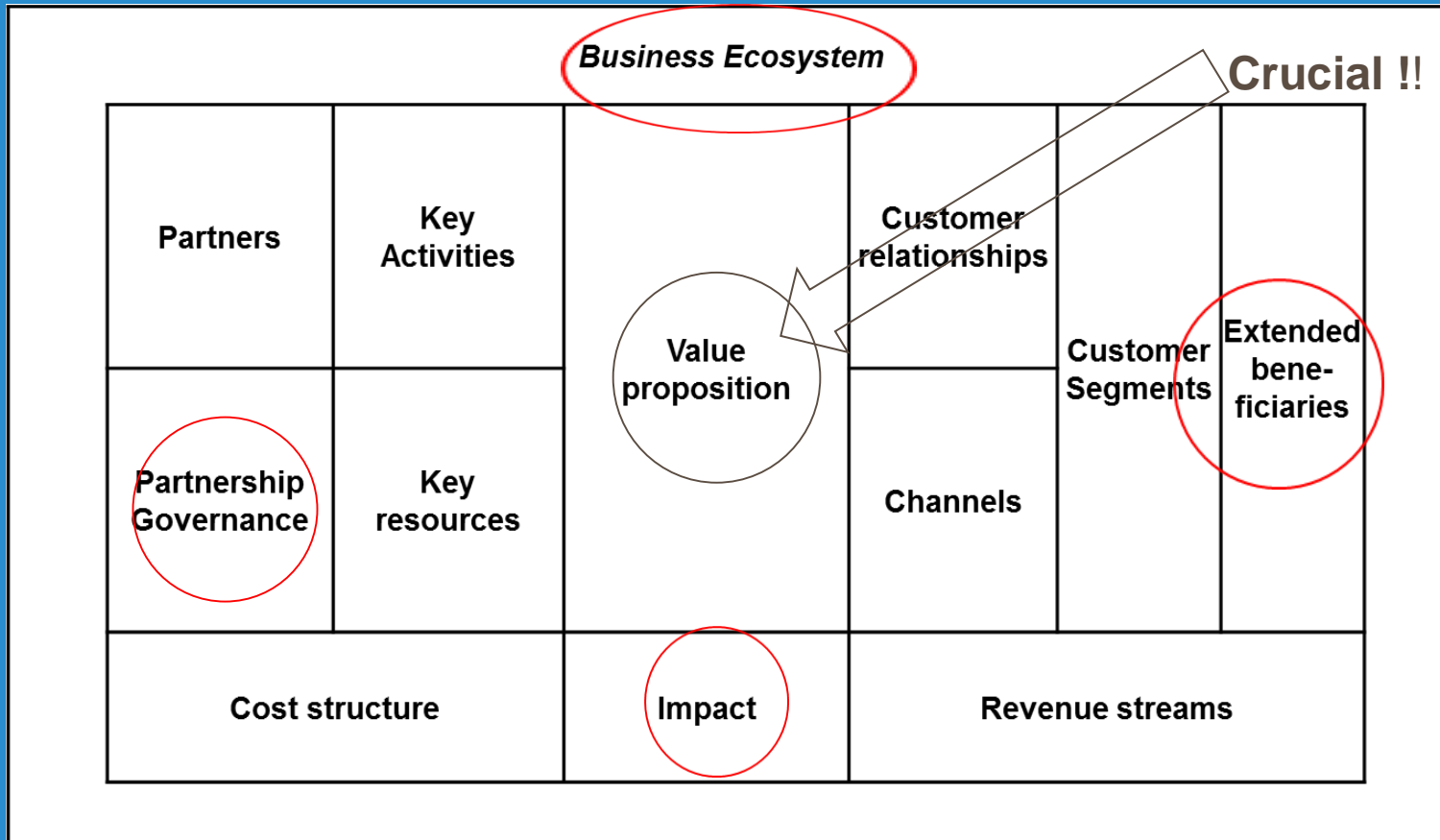
## *“PIB Scan”*

Assessment Tool for **PPP** Inclusive **B**usiness

A potential tool for indicating PPPs’ potential sustainability perspectives from a private sector perspective



## PIB Scan based on Business Model Generation methodology







## 4 Fields added to original methodology

- > **Governance of the partnership**
  - because in a PPP this is a crucial point of attention
- > **Extended beneficiaries**
  - to better capture the developmental impact beyond the direct customers
- > **Social and environmental impact**
  - besides the economic return, again to highlight the developmental relevance
- > **Business Ecosystem** (enveloping around the whole canvas)
  - to capture factors beyond the PPP's reach (e.g. legal or institutional framework, regulations) but that could greatly influence the PPP and bring additional risks



**Business Ecosystem**

What strengthening strategies are used to influence the business-ecosystem?

How does the business address barriers to doing business and to scale? (e.g. limited knowledge and skills among the BoP; lack of market information; ineffective regulation; inadequate infrastructure; limited access to finance)

How is the business embedded in local structures?

<p><b>Partners</b> Who are the key partners for the business? Who are the key suppliers? Which key resources are acquired from partners? Which key activities do partners perform?</p>	<p><b>Key activities</b> What key activities are required for: - creating the value proposition? - operating the distribution channels? - maintaining customer relationships? - managing revenue streams?</p>	<p><b>Value proposition</b> What value is delivered to the customers? Which of the customer's problems is it solving? What combinations of products and services are offered to each customer segment? Which customer needs are satisfied?</p>	<p><b>Customer relationships</b> What type of relations are established with each customer segment and how are they maintained? How are these integrated in the rest of the business model? How costly are they?</p>	<p><b>Customer Segments</b> For whom is value created? Who are the most important customers?</p>	<p><b>Extended beneficiaries</b> Who benefits from the business besides the customers? What are the most important groups identified? Who are the customers of my customers?</p>
<p><b>Partnership Governance</b> Who took the initiative for the partnership? Who is leading the partnership? Which partners are crucial, will cause the business to fail when they move away? How is the partnership organised, structured? How does the partnership deal with unforeseen circumstances?</p>	<p><b>Key resources</b> What key resources are required for: - creating the value proposition? - operating the distribution channels? - maintaining customer relationships? - managing revenue streams?</p>		<p><b>Channels</b> Through which channels are customers reached? How are these channels integrated? Which ones work best and which are most cost-efficient? How are these (being) integrated into customer routines?</p>		
<p><b>Cost structure</b> What are the most important costs inherent to the business model? Which key resources are most expensive? Which Key activities are most expensive?</p>	<p><b>Impact</b> What impact (social, environmental, economic) is generated? What sustainability issues are addressed or solved?</p>	<p><b>Revenue streams</b> For what value are the customers willing to pay? For what do they already pay and how? How would they like to pay? How much does each revenue stream contribute to the overall revenues?</p>			



# How to be used? An example

Business Ecosystem					
<p>Research - Setting up cricket knowledge centers for learning and PME</p> <p>Awareness raising - A communication strategy plan directed towards BoP consumers, authorities, farmer groups and change agents will be set up to raise awareness on cricket derived food products. Also, farmers as well as other value chain actors and endorsers (e.g. health workers) will be trained.</p> <p>Partnering with local players, embedding businesses in the value chain in Joint Ventures of local entrepreneurs</p>					
FDOV12XXYY					
<p><b>Partners</b></p> <p>Key partners: -4000 BoP Farmers who have to start rearing crickets</p> <p>- local retailers (mixa, farmer organizations, BADDA)</p> <p>Essential partners: Partners who know the local eco-system or link to international donors: ICCO, ADS, BoPINC</p> <p>Knowledge partners who provide assistance with setting up insect farms: Venik, Jagran; TNO; Kenya Biologics Ltd; HAS; (BUC7)</p> <p>Equipment development (OEM): Mixa Food &amp; Beverages Ltd</p> <p>Knowledge partners on food processing: Mixa Food &amp; Beverages Ltd, Venik, KBL</p> <p>Knowledge partners on marketing: Mixa Food &amp; Beverages Ltd, Venik, BADDA, BoPinc, BUC)</p> <p>Local partner on sales and transportation: BADDA, cooperatives through ADS;</p> <p>The key resources are mostly acquired from the partners in the PPP. There also need to be suppliers for the insect feed and farm inputs and for the packages of the finished product, these are not all in the proposal. Also timely transportation seems an important activity for which partners are needed that are not identified.</p>	<p><b>Key activities</b></p> <p>Rearing - production (cricket farming), quality control (disease prevention)</p> <p>Food processing and marketing - preservation, processing (drying, milling, food manufacturing), packaging, new food design, retailing/selling</p> <p>Providing Access to credit - small farmers need to buy (and finance) starter kits from the project, the MF is a key activity to enable this</p>	<p><b>Value proposition</b></p> <p>Provide a year round availability of high quality fresh crickets, cricket flour and cricket derived products at affordable prices to local consumers which contributes to better availability of protein-rich food</p>	<p><b>Customer relationships</b></p> <p>A brand for cricket derived food products will be developed and promoted. Relation seems highly transactional</p>	<p><b>Customer Segments</b></p> <p>For farmers, the direct (B2B) customers are food-processors/retailers that are planned to be set up by the project.</p> <p>For the whole BM, the final customers are individual household level BoP-consumers in Kenya and Uganda.</p> <p>No segmentation among them observed in proposal.</p>	<p><b>Extended beneficiaries</b></p> <p>Apart from consumers the other value chain actors (4000 farmers, 4-80 processors and about 150 shopholders) will benefit if the PPP is successful.</p> <p>Improved food includes health benefits in the region and improved income stimulates local economic development</p>
<p><b>Cost structure</b></p> <p>*Raw materials (37%/yr 10 - 6%/yr 1)</p> <p>Labor costs (32%/yr 10 - 5%/yr 1)</p> <p>Other cost (23%/yr 10 - 4%/yr 1)</p> <p>Water and electricity (2%/year 10 - 84%/year 1)</p> <p>Depreciation hardware unclear*</p>	<p><b>Key resources</b></p> <p>Insect eggs for starting farming (starter kit)</p> <p>Farm equipment for rearing (starter kit)</p> <p>feed for insects</p> <p>processing and packaging capacity (equipment/machinery)</p> <p>Preservation agents or processing capacity</p> <p>Packaging materials</p> <p>Storing facilities</p> <p>Transportation</p> <p>Access to microfinance for farmers</p>	<p><b>Impact</b></p> <p>Income of 4,000 smallholder farmers will be raised (economic impact)</p> <p>Food security of 200,000 BoP consumers enhanced (including dietary diversity/ improved access to protein)</p> <p>Environmental - feed to food ratio for insects is better than cattle/pigs, while they also use mainly agricultural waste products and little water.</p> <p>Indirect benefit on environment if consumers change food patterns to include more insects compared to meat. Also indirect benefit on climate due to reduced GHG emissions</p>	<p><b>Channels</b></p> <p>B2C to 150 outlets that sell to final consumers. 4 retail enterprises mentioned but not clear if these represent different channels.</p>	<p><b>Revenue streams</b></p> <p>Final consumer pays per purchase (basic retail)</p> <p>Farmers buy starter kits (B2B)</p> <p>Processors buy equipment (B2B)</p> <p>Profit margins along the value chain are considered typical for the respective countries (Farmer 27% Cooperative 5% Processor 9% 12% Retail 12%)</p> <p>Unclear if customers are willing to pay.</p> <p>Different prices for fresh crickets, cricket flour and derived products</p>	



## Risk analysis in the PPP proposals

- > all PPPs provided a risk analysis
- > most PPPs do not constitute significant risks for the Dutch partners involved
- > risks clearly defined but *not allocated* to specific roles and/or parties nor translated into implications for one or more parties to deal with (one positive exception)
- > In broader PPP context (e.g. international funding arrangements) risk allocation as characteristic part of the PPP construction
- > Risk allocation key in impact / sustainability of interventions



## Overall conclusions and recommendations [1/ 2]

### 1. Engagement of the private sector

- CSR-dominated private sector participation, commercial private sector drivers and the piggy back-driven private sector

### 2. Return on Investment

- Only half of both FDOV and FDW PPPs specifically aim to generate RoI
- Fits to the profile of these PPP instruments to support PPPs with other value objectives (like social and /or public value)

### 3. Inclusiveness

- Not all PPPs have explicit strategy and involvement of BoP is weak
- Follow-up questions: Is an explicit BoP strategy needed or conditional for the PPP-instrument as such? Is an involvement of the BoP itself a critical success factor for a successful intervention?



## Overall conclusions and recommendations [2/2]

### 4. Risk analysis

- Risk allocation deserves more attention from PPP parties. It is not only about addressing risks, mitigation measures, but also a clear allocation of risks within and after ending of the PPP

### 5. PIB Scan

- New tool to capture the business model of the PPPs and visualize their potential from a business model perspective
- Needs further validation to test value and applicability, but expected to be valuable instrument to assess overall business strategies including pro-poorness and the economic, social and public value of PPP



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