



Governance and institutional aspects of decentralized dissemination of a sustainable biogas sector in Indonesia

by

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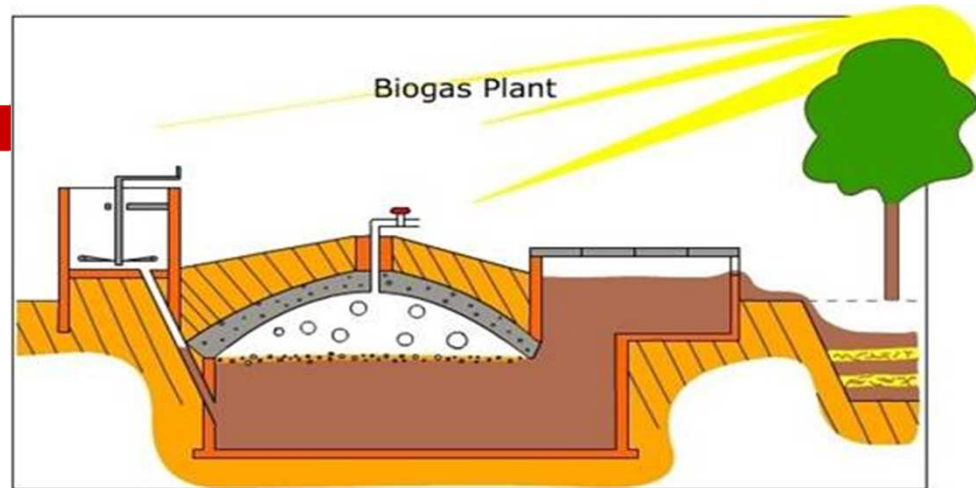
Programme Manager BIRU

(Indonesia Domestic Biogas Programme)

Wageningen, 22 may 2011



Presentation outline



- BIRU programme
- BIRU strategies
- Current status
- Institutionalizing the programme management
 - Three stages of programme development
 - From external to local management
- Institutionalizing the biogas sector

Indonesia Domestic Biogas Programme



- Programme started in May 2009
- Duration - up to the end of 2012 (extendable)
- Construction target 8,000 plants (of which 2,000 outside Java)
- Hivos is implementing the programme in coordination with the Indonesian Ministry of Energy and Min Resources
- SNV is providing technical support
- Dutch Embassy is providing funding for the program
- 2 million Rupiah (EUR 165) subsidy to the households
- Facilitation of access to credit for households



Strategies

- Private sector involvement
- Local companies/co-operatives are engaged for plant construction & maintenance activities
- Demand driven construction, sense of ownership
- Maintain quality as per standards and certification
- Creates local, sustained employment
- Leads to commercialization
- Sustainable approach (post-construction care)



Programme Status as of 18 May 2011

- Digester type chosen: fixed dome (derived from SNV)
- As of 18 May 2011: 2,760 digesters are built, ca. 250 are being constructed and more than 1,000 are in the pipeline
- BIRU works with 32 partners in 7 provinces, about to start in Nusa Tenggara Timur province (joining Hivos' Iconic Island initiative in Sumba island: 100% renewable energy)
- 4 partners providing biogas appliances
- ca. 300 masons and 60 supervisors have been trained
- Masons trained using standardized quality (only certified masons are allowed to build)



Programme Status (continued)

- CDM PIN being prepared, carbon baseline survey upcoming
- Users getting intensive user training
- Bioslurry user training starting up
- Promotion and training materials developed
- Farmers and cooperatives have links to finance institutions to obtain credit (still very limited)



Government involvement (1)

Basic approach in Indonesia:

- Market-based with limited government involvement in initial stage

Advantages of limited govt involvement:

- Work around bureaucracy (budgets, decision making, procurement rules)
- More flexibility, allowing for quick results (creativity, making use of opportunities)



Government involvement (2)

Disadvantages of limited govt involvement:

- Chance of low sense of government ownership
- Endorsement of project activities (area selection, subsidy amounts, etc.) can take time
- Institutionalization may in the long run become more difficult



Institutionalizing Programme Management

Complex programme:

- Many and different kinds of partners
(cooperatives, government, private sector,
NGOs, banking sector, media)
- Many different cultural settings in many different
areas



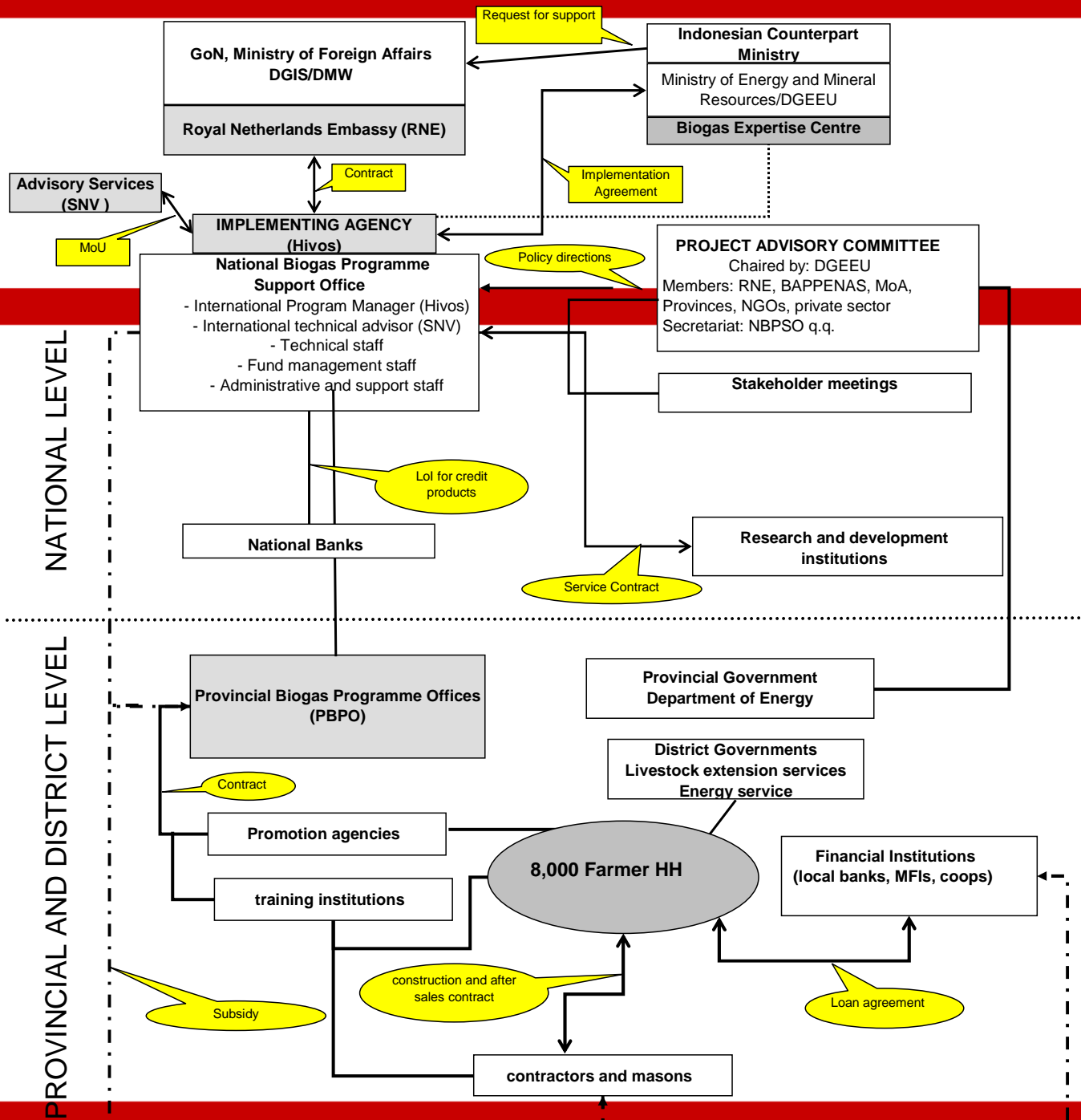
Institutionalizing Programme Management (concept)

- Decentralized development**
- Market-based**
- Sustainable**
- Local ownership**



Institutionalizing Programme Management (implementation)

- ❑ **Decentralized development:** set up regional Hivos offices with mandate to select partners and target regions, provide support to and inspect partners.
- ❑ **Market-based:** target cooperatives, NGOs and private sector, push these actors to work on commercial basis
- ❑ **Sustainable:** ensure quality of biogas digester, ensure market with promotion support, push farmers to pay
- ❑ **Local ownership:** implementation fully by partners, gradually shifting responsibilities to partners or local organisation (after first phase)





Three stages of programme development

BIRU I (2009-2012)	BIRU II (2013-2016)*	BIRU III (2017-2020)*
<i>Currently running</i>	<i>In preparation (tentative)</i>	<i>Very tentative</i>
Start-up phase	Transition phase	Consolidation phase
8,000 biodigesters	26,000 biodigesters	52,000 biodigesters
Annual plan: Yr 1: 150 Yr 2: 1,150 Yr 3: 2,600 Yr 4: 4,100	Annual plan: Yr 1: 5,000 Yr 2: 6,000 Yr 3: 7,000 Yr 4: 8,000	Annual plan: Yr. 1: 10,000 Yr 2: 12,000 Yr 3: 14,000 Yr 4: 16,000
Outputs by end of 2012: 400 biodigesters/month 30+ partners 300+ masons/supervisors 10+ appliance makers	Outputs by end of 2016: 800 biodigesters/month 60+ partners 800+ masons/supervisors 20+ appliance makers	Outputs by end of 2020: 1,600 biodigesters/month 120+ partners 1,600+ masons/supervisors 30+ appliance makers



Three stages of programme development

Key activities and level of devolution	Key activities and level of devolution	Key activities and level of devolution
<p>1. Technology development:</p> <ul style="list-style-type: none"> a. Design selection with stakeholders b. Mason training c. Facilitate access to credit d. Set up and maintain QC system (Quality Control to set standards and do inspections) e. Set up and maintain O&M system (user training) f. Develop biogas appliance manufacture and provide support to construction partners 	<p>1. Devolution of low risk responsibilities, such as:</p> <ul style="list-style-type: none"> a. training b. promotion 	<p>1. Devolution of key activities, such as:</p> <ul style="list-style-type: none"> a. Programme management b. Quality Control
<p>2. Program structure:</p> <ul style="list-style-type: none"> a. Office establishment and staff recruitment b. Standard Operating Guidelines c. Organization structure up and running 	<p>2. Government and other partner(s) to play a more prominent role:</p> <ul style="list-style-type: none"> a. Active involvement in promoting biogas b. Financing (small-scale), gradually increasing c. Coordination and networking d. Embedding of biogas in policies 	<p>2. Government to work together with private sector and NGO(s) and programme partners, playing a coordination role:</p> <ul style="list-style-type: none"> a. Strategy development b. Institutional development c. Regulating role d. Umbrella function



Three stages of programme development

Key activities and level of devolution	Key activities and level of devolution	Key activities and level of devolution
<p>3. Implementation by team of local and international programme staff with endorsement role of government and close cooperation with and support to local stakeholders.</p>	<p>3. Institutionalization:</p> <ul style="list-style-type: none"> a. Initiate establishment of independent local institution b. Strong support from outside 	<p>3. Strong role of independent local institution with high level of accountability to government:</p> <ul style="list-style-type: none"> a. Monitoring b. Financing c. Carbon financing
<p>4. Provision of TA and full management</p>	<p>4. Provision of TA (limited) and management support</p>	<p>4. Limited advisory role remains:</p> <ul style="list-style-type: none"> a. International networks b. Financing support c. Carbon markets, validation matters, etc.



Three stages of programme development

Funding	Funding	Funding
<p>Depending almost 100% on external funding. Government to allocate counterpart funding voluntarily.</p>	<p>Request government to allocate funds for partial programme funding</p>	<p>Major role of carbon fund revenues, covering at least 50% of programme funding.</p>
<p>Develop carbon mechanism, to be in place before end of programme.</p>	<p>Ensure carbon mechanism revenues are pumped back into programme, funding the programme activities partially.</p>	<p>Preferred total financing by government of other 50%, until at the end of this programme phase the carbon funds and the private sector are sufficient to sustain the programme for 100%.</p>
	<p>Still depending on international donor funding, but at a lower level and phasing out.</p>	

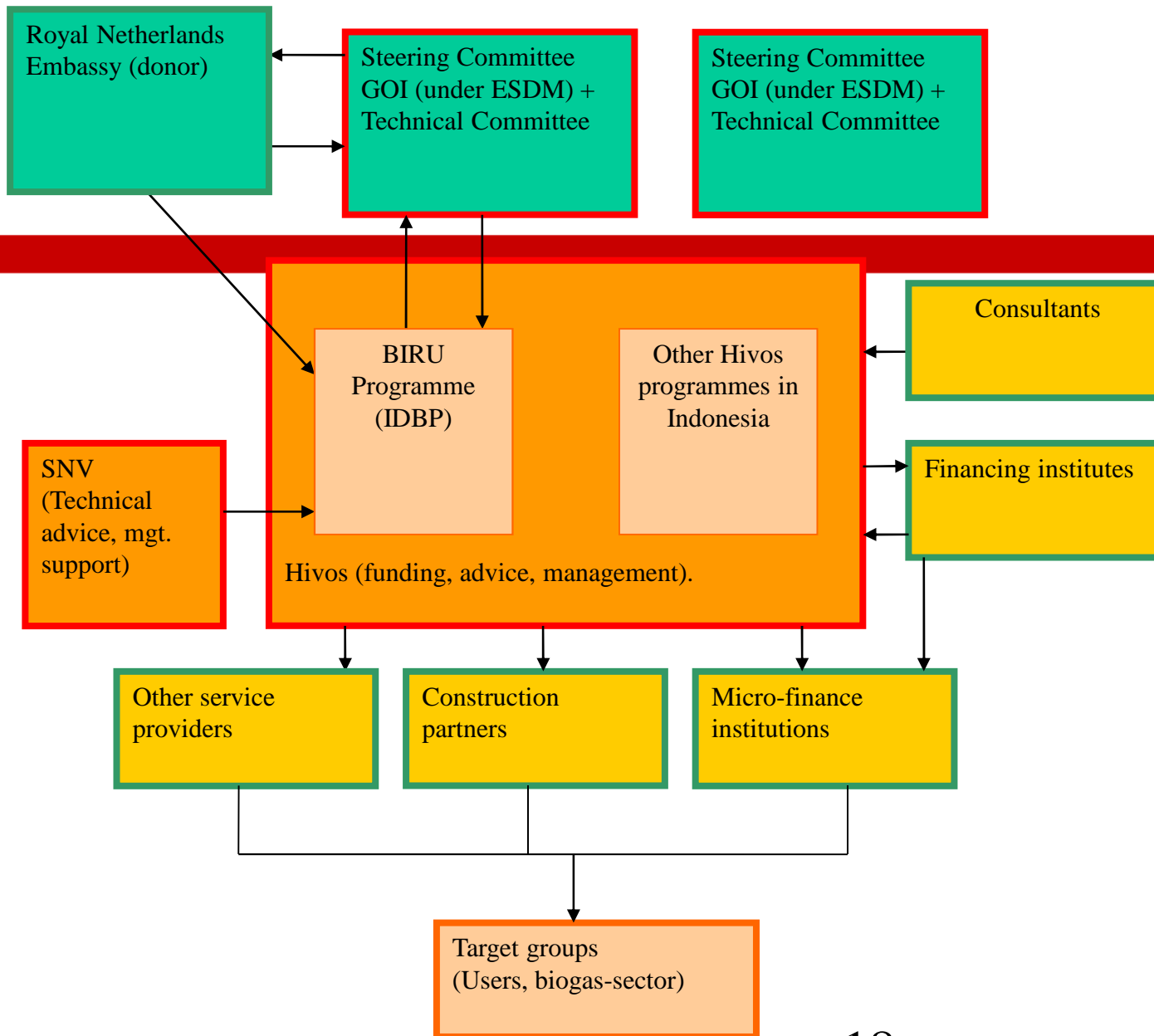


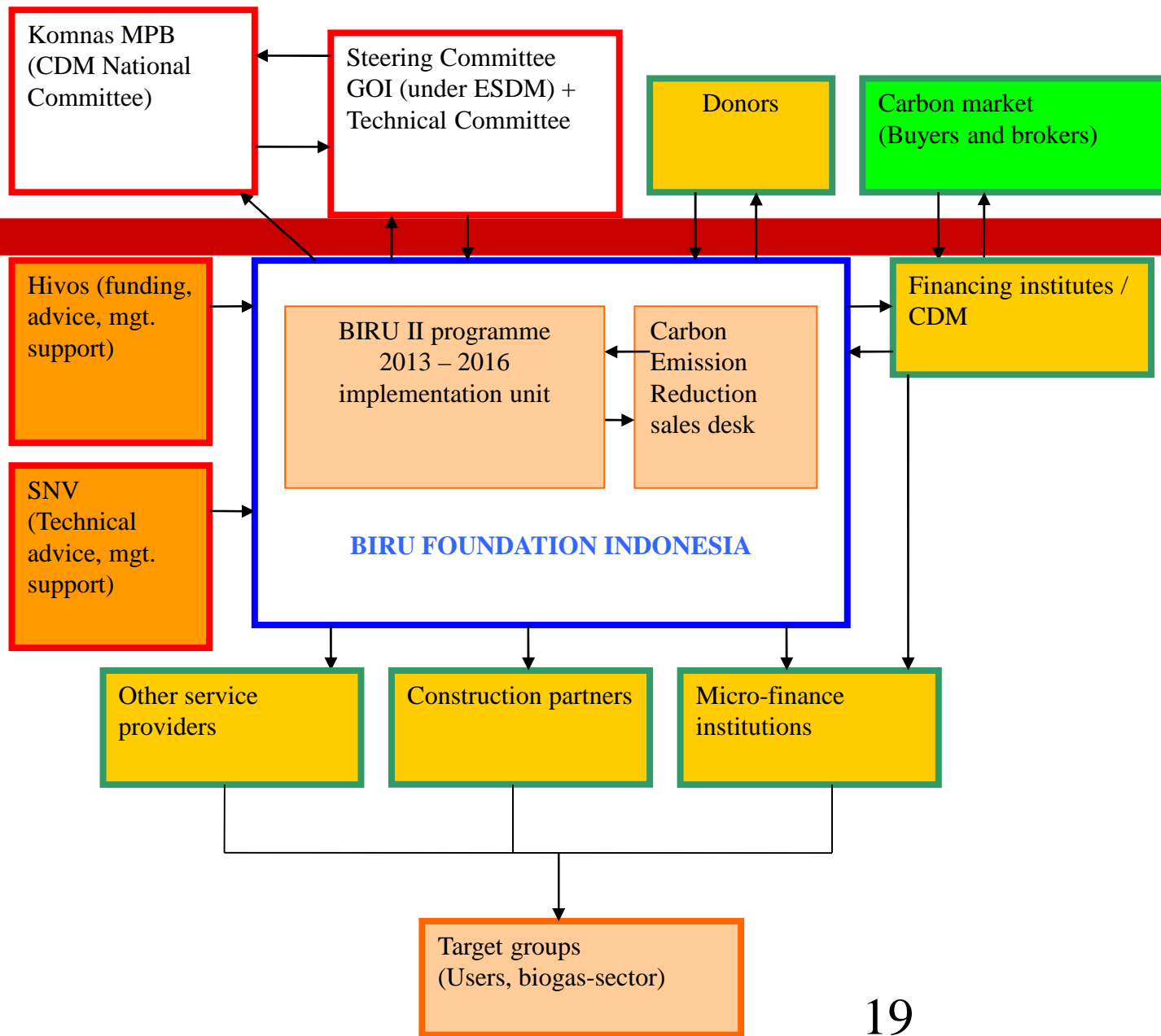
From external to local management

Initial phase:

- Develop organization structure
- Prepare Standard Operating Guidelines
- Ensure programme is up and running
- Develop CDM to ensure carbon revenues
- Discuss with government and donor organisations about follow up funding and institutional requirements

Then: step back and start devolution of mandates: first only low risk activities, later key responsibilities







Institutionalizing the biogas sector components

- Technology development
- Promotion and marketing
- Access to credit
- Education and training
- Bioslurry management
- Gender mainstreaming
- Management strengthening
- CDM



Technology development

- Construction firms (mason training)
- Appliance manufacture firms (biogas appliances)
- Quality control
- Standardization (not existing yet for biogas)
- Introduce technology to educational sector



Promotion and marketing

- Awareness raising sessions (by partners)
- Production of promotion materials
- Training of trainers in the field of promotion
- Promotion/advertisement agencies if needed
- Media



Credit provision

- Ensure capital for micro-finance sector
- Assess MFIs and engage these to provide MFI services in biogas target areas
- Develop financing mechanisms to ensure smooth use of financing options
- Provide training as needed

Big challenge: how to provide credit to individual farmers, especially in remote areas.



Bio-slurry management

- Ensure that more than 50% of the farmers makes use of bio-slurry through training and demonstration plots (role of partners)
- Cooperate with government extension workers
- Ensure that farmers cannot only use the bio-slurry themselves but can also access bio-slurry value chain (drying, delivery to factories, etc.)



Gender mainstreaming

- Ensure even distribution of benefits of biogas at household level
- Decision making levels of household members regarding biogas acceptance and use
- Enhance role of women in biogas sector development (promotion, construction)
- Ensure these aspects are well-integrated before further devolution of responsibilities takes place



Managerial strengthening of partners

- Provide management, promotion, administrative, organizational and technical training
- Appliance makers supported with R&D funds, designs, samples and other support as needed
- Various kinds of capacity building as deemed necessary to develop skills



Clean Development Mechanism

- ❑ Undertake PIN, carbon baseline survey and PDD
- ❑ Register for CDM
- ❑ Ensure government and other stakeholder support the institutional setup of the CME (Coordinating/Management Entity)

Challenges:

- a. limited experience of Gov of Indonesia
- b. Development of the institutional framework of CME
- c. Conservative calculation methods



Conclusions

- ❑ Decentralized dissemination of biogas sector works
- ❑ Start with establishment of strong programme structure
- ❑ Then, gradual devolution of responsibilities, first the low-risk ones, later the key responsibilities
- ❑ Set up a local entity which takes over the entire organizational structure and Standard Operating Guidelines
- ❑ Maintain Technical Assistance and capacity building

Thank you

