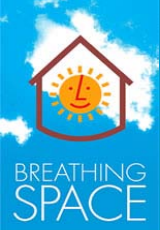


Shell Foundation Breathing Space Programme

HEH Strategy Review



Shell Foundation HEH Objectives

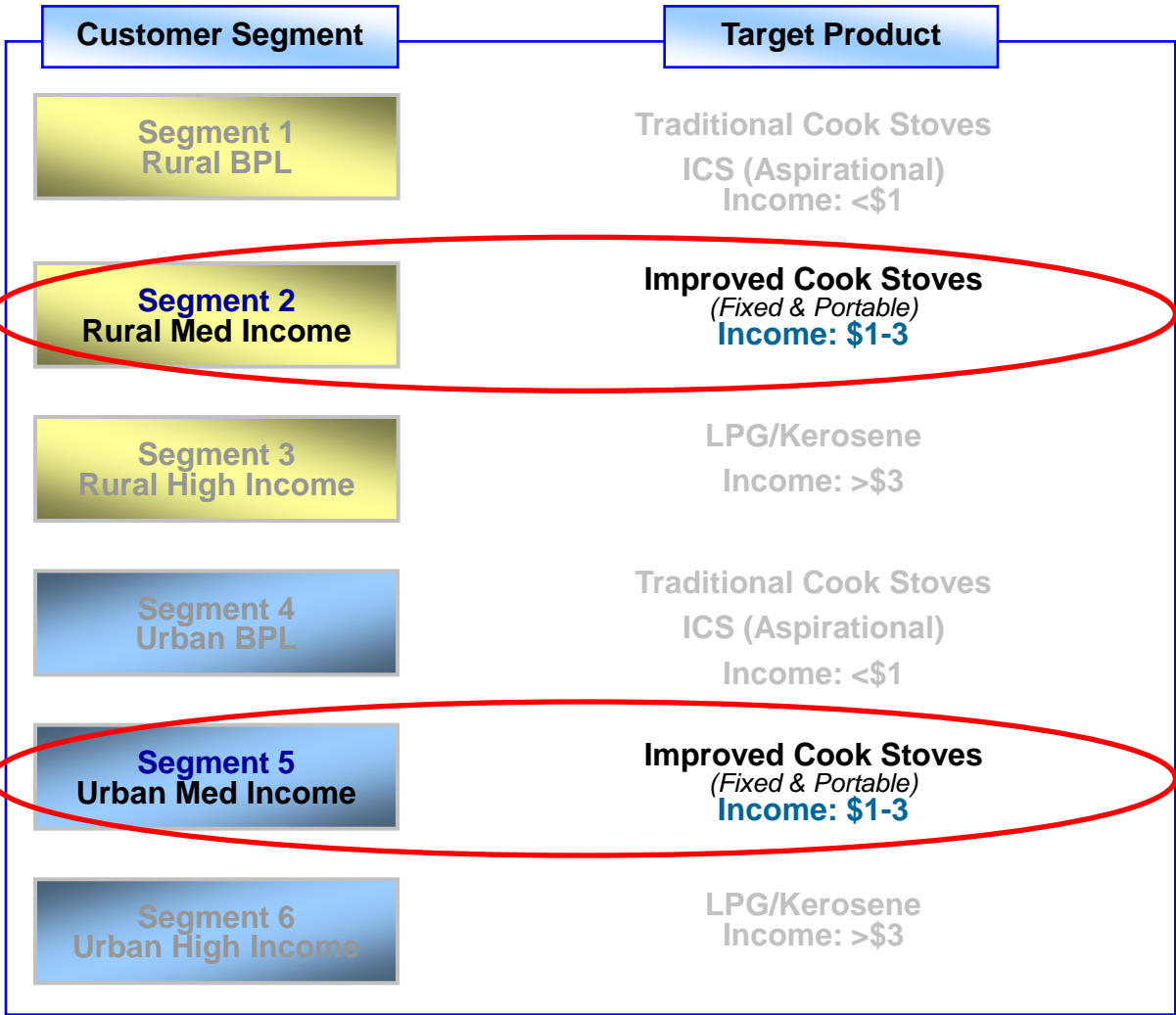
Shell Foundation aims to achieve a significant long term reduction in the incidence of Indoor Air Pollution at the global level, by deploying approaches which are market oriented and commercially viable

Processes and Tools To Date

- ◆ Pilot and Scale up of projects globally
- ◆ Monitoring and Evaluation
- ◆ Technology equipment, publications and training
- ◆ Commercialisation Toolkit & Business Plan Toolkit

Which products for which customer segments?

Most households aspire for modern cooking fuels, however, based upon affordability and fuel availability, improved cook stoves provide a practical step up the energy ladder.



- ◆ ICS satisfies both **customer affordability** and **cooking requirements**
- ◆ Opportunities exist to help customers **access LPG/Kerosene** through financing, however, market size and impact may be limited
- ◆ Large market opportunity to fill a **gap** between traditional cook stoves and modern fuels

Market Evaluation Criteria

Each geography is rated against the following market criteria in order to identify which markets provided the greatest commercial opportunity for an IAP programme.

- ✓ **Size of the IAP problem**
- ✓ **Market Environment**
 - ✓ Political & Business Environment
- ✓ **Stove Industry Maturity**
- ✓ **Customer Demographics**
 - Income Levels
 - Customer Value Proposition

Rating:

- High = 4
- ◐ Medium = 3
- ◑ Low = 2
- Minimal = 1

Region	Size of the IAP Problem	Market Environment	Foreign Aid Trends	Industry Maturity	Industry Players	Customer Demographics
East Asia						
South Asia						
Latin America						
Sub Saharan Africa						

Target Countries

A high level review of the selected geographies indicates that **India, Uganda/Kenya** and **Brazil** are the most commercially attractive markets to consider for future programmes.

Rating:

- High = 4
- ◐ Medium = 3
- ◑ Low = 2
- Minimal = 1

Country	Size of the IAP Problem	Market Environment	Foreign Aid Trends	Industry Maturity	Industry Players	Customer Demographics	Target Market Size
East Asia							
China	●	◐	◑	●	●	●	31,147,200
Indonesia	●	◑	●	◑	◑	◑	16,687,891
Thailand	◑	◑	◑	◑	◑	◑	6,243,855
South Asia							
India	●	●	◑	◑	◑	◑	68,025,765
Pakistan	◑	◑	◑	◑	◑	◑	6,816,600
Nepal	◑	◑	◑	◑	◑	◑	1,234,946
Latin America							
Brazil	◑	●	◑	◑	◑	◑	2,670,454
Sub Saharan Africa							
Uganda	◑	●	●	●	●	●	1,793,262
Kenya	◑	◑	◑	●	●	●	1,667,749
Nigeria	◑	◑	◑	◑	◑	◑	7,283,200
Ghana	◑	◑	◑	◑	◑	◑	1,073,446
Ethiopia	◑	◑	◑	◑	◑	◑	1,629,570

- ◆ China provides a commercially attractive market, however political constraints may limit the opportunity within the region
- ◆ A China Opportunity Assessment will be conducted to determine the impact and scale of an intervention

Urban/Rural Split for Commercial Market for Improved Cooking Devices

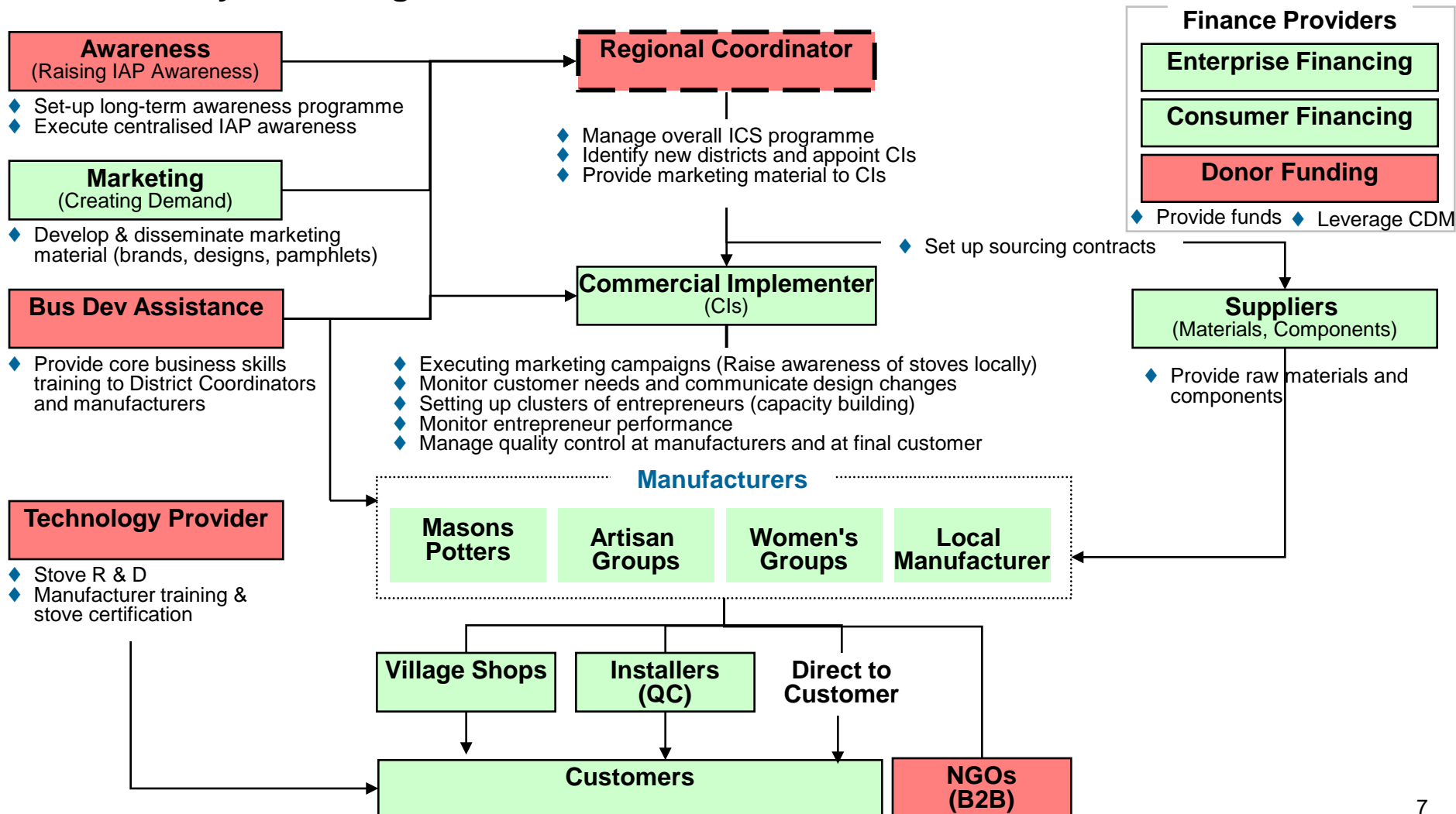
Country	Urban	Rural
China	11%	89%
India	9%	91%
Uganda	15%	85%
Brazil	10%	90%

How do we serve rural customers?

Business Model: Rural Decentralised Model

Segment 1 Rural Below Poverty Line	Segment 2 Rural Medium Income	Segment 3 Rural High Income
Segment 4 Urban Below Poverty Line	Segment 5 Urban Medium Income	Segment 6 Urban High Income

A **Rural Decentralised Commercial Model** is the appropriate business model for the commercially viable target market of **rural medium income** households.

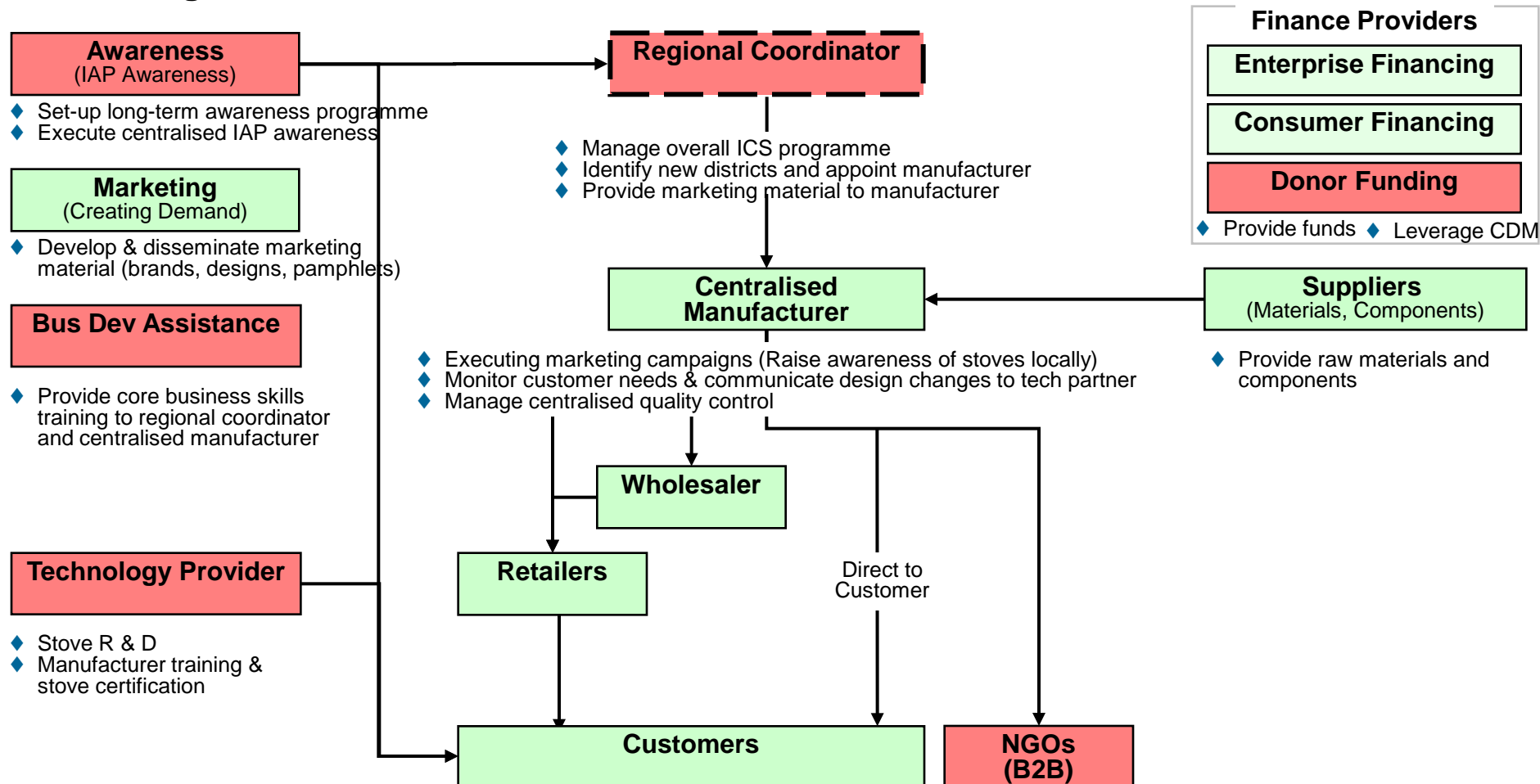


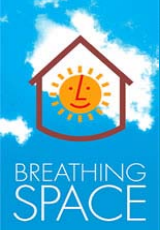
How do we serve urban customers?

Business Model: Urban Centralised Model

Segment 1 Rural Below Poverty Line	Segment 2 Rural Medium Income	Segment 3 Rural High Income
Segment 4 Urban Below Poverty Line	Segment 5 Urban Medium Income	Segment 6 Urban High Income

A **Urban Centralised Model** is the appropriate business model for the commercially viable target market of **urban medium income** households.





Shell Foundation HEH Objectives

Shell Foundation aims to achieve a significant long term reduction in the incidence of Indoor Air Pollution at the global level, by deploying approaches which are market oriented and commercially viable

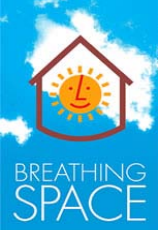
**20 million stoves sold in 5 countries in next 5 years
employing \$50million**

Shell Foundations role

- **Overseeing** each project and **managing** it
- **Identifying, Scoping ,Capacity Building** and leading the way for deliverables with all partners on
 - 6 new geographies
 - BDA
 - Awareness
 - Funds
 - Bank financing
 - Technology
 - Governance on boards of main commercial project partners
 - Consolidated reporting by each project- Monthly
 - Communications – Build the storylines

HEH 5 Year Strategy

- ◆ SF will 'own' this in 2006 and part 2007 and then vision for Breathing Space spin off.
- ◆ This is a commercial model and will probably include commercial players in some roles
- ◆ Focused and strategic but recognise that it is only one solution
- ◆ Still a critical need to find a suitable technology that will deliver the improved stove performance and the customers needs
- ◆ Continued focus on Biomass to reach the most commercially viable and significant scale customer segment
- ◆ No strategic focus on BPL or institutional customer segment (B2B model to be dealt with opportunistically)
- ◆ Blend of grant and "investment" funding (1:3)
- ◆ Difference to now: Right role/Right People vs. everything for all; investment vs. grant; Ad hoc enablers vs. focus on enabling environment



HEH Timeline - Overview

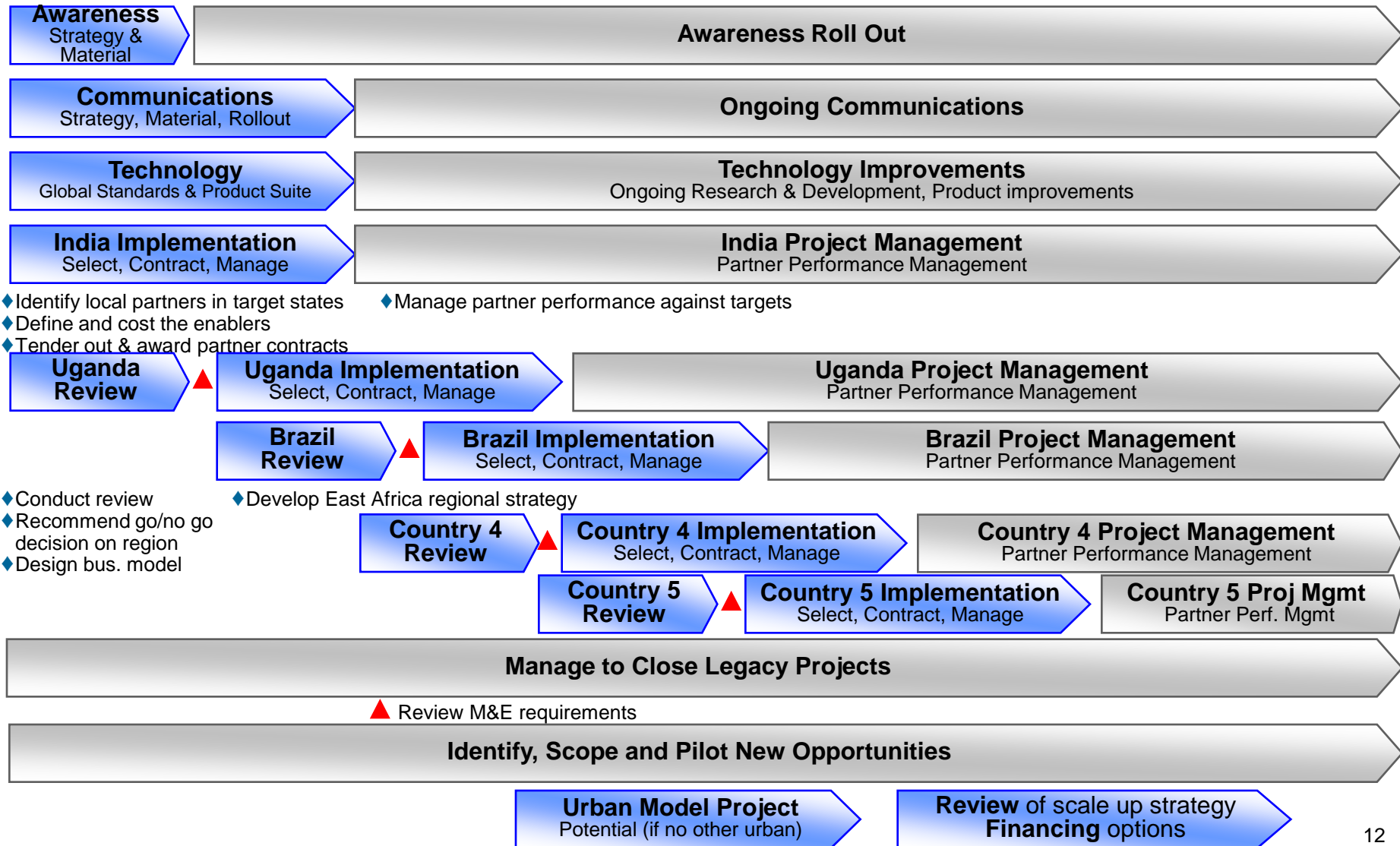
 SF Project Activity
 SF Business As Usual Activity

2006

2007

2008

2009



- ◆ Identify local partners in target states
- ◆ Define and cost the enablers
- ◆ Tender out & award partner contracts

- ◆ Manage partner performance against targets

- ◆ Conduct review
- ◆ Recommend go/no go decision on region
- ◆ Design bus. model

- ◆ Develop East Africa regional strategy

- ▲ Review M&E requirements

Next Steps...

- ◆ Consult external stakeholders for feedback
- ◆ Recruit new SF HEH personnel
- ◆ Scope and cost enablers for India, and then Globally
- ◆ SF Roll out in India
 - ◆ Getting interest contacting potential partners Q1
 - ◆ Scoping Q2
 - ◆ Tending Q3
- ◆ Other country reviews