

Cambodia Jatropha Bio-fuel Project

by

Green Acres Private Limited



Cambodia Jatropha Bio-Fuel Project



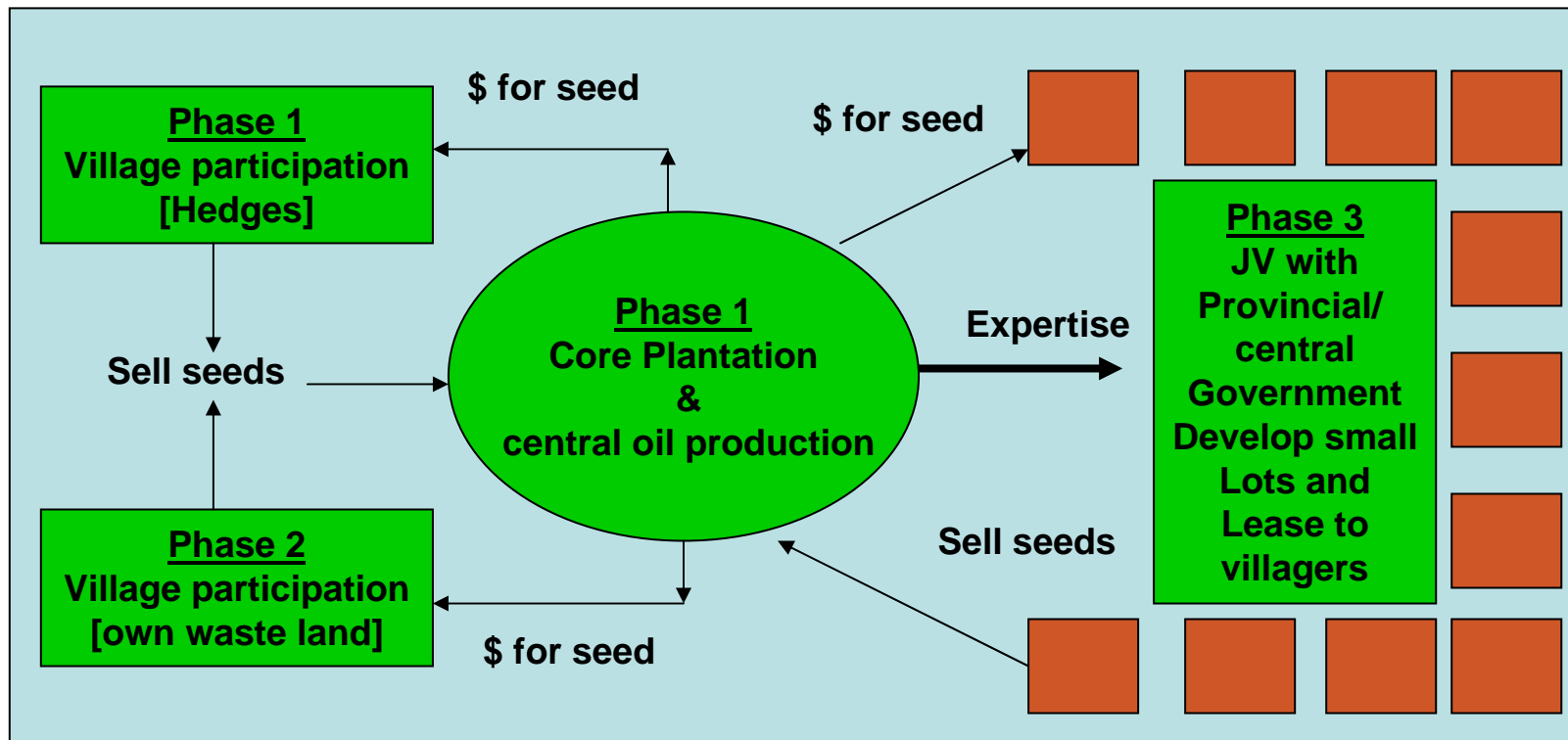
- **Project Background**

- Pilot study / pilot project started & funded by Global Village Energy Partnership [GVEP] Program [2005] in Cambodia.
- Andrew Williamson's feasibility study - it might be financially viable.
- Original 2 potential investors pulled out. Green Acres Private Limited revived project in 2006.
- A 83 ha waste land [Kg Chhang] Province acquired for the project
- Project started in mid-2006. To-date 35 ha have been planted.

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- The Project Business Model**



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- **Business model**
- A 93hectare plantation with a central oil processing facility
 - “Symbol” of long term commitment by investors
 - instill confidence in villagers to participate in project
- Villagers to harvest jatropha seeds – from existing jatropha trees planted as hedges [and also from wild]
- Villagers with waste land to grow jatropha under contract farming method. Green Acres provides expertise, cuttings and fertilizers
- Work with provincial/central government to allocate waste land for project
 - Green Acres provides expertise, cuttings and fertilizers
 - Lease small planted plots to individual farmers on behalf of government
 - New owners sell seeds to Green Acres and part proceeds go to pay government for land.
 - Win-win-win for all 3 parties

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Item description	Year 1	Year 2	Year 3	Year 4	Year 5
Incorporation cost/audit	7,462	1,300	1,300	1,300	1,300
Land & improvement cost	77,543	950	950	350	350
Planting related cost	5,727	7,470	7,470		
Equipment cost	3,180	19,410	4,410		
Inter cropping set up cost	1,428	2,756	2,756	2,756	2,756
Oil Processing Facility	8,950	4,500	1,000	1,500	2,000
Oil production cost		5,059	12,398	22,500	29,117
Factory/ warehouse/office	12,460	10,500	10,950	11,200	11,300
Staff expenses	18,380	16,920	18,240	19,560	20,880
Total cash outflow	135,130	68,865	59,474	59,436	67,893
Total revenue [inflow]	1,231	8,001	31,163	74,163	119,826
Net cash flow	[133,899]	[60,865]	[28,311]	14,807	51,933
Fund raised to-date	130,000				
Beginning cash	-	[3,899]	[64,763]	[93,074]	[78,267]
Ending cash	[3,899]	[64,763]	[93,074]	[78,267]	[26,334]
Shortfall in funding	[3,899]	[64,763]	[93,074]	[78,267]	[26,334]

Cambodia Bio-Fuel Project 5 year cash flow forecast [cumulative]

Item description	US\$
Incorporation cost	12,662
Land & land improvement cost	80,143
Planting related cost	20,667
Equipment cost	27,380
Intercropping set up cost	17,950
Oil processing facility	56,410
Oil production cost	93,980
Office & factory set up cost	12,452
Staff expenses	69,074
Total operating cost	390,718
Revenue generation	
From oil production	196,223
From intercropping	38,161
Total revenue	234,384
Net cash flow	-156,334
Fund raised	130,000
Shortfall	-26,334
<i>Cumulative cash flow shortfall ranges from low of \$3,889 [year 1] to high of \$93,074 [year 3]. Cash flow positive from year 4]</i>	

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- **Benefits to the community**
 - **Immediate benefits**
 - Jobs for villagers [current 20, increasing to 80] in the plantation / oil mill/ marketing etc.
 - Increase their income [at least US\$1 a day]
 - A new cash crop from their own trees [hedges]
 - **Future benefits**
 - Convert unused land to income generation [Phase 2]
 - Potential ownership of additional land [Phase 3 - JV with government]
 - **Community contributions**
 - Green Acres intends to plough its “profits” into the community via improvements in village schools, water and electricity etc.

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Thank you



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End of Presentation