

Supplementary Materials

Supplementary I: Questionnaire

Part I: Questionnaire for Project Managers ¹

Contact Details	
Name of company / project	.....
a. Contact person	.....
b. Position	..... / ..... / ..... (dd / mm / yyyy)
Date filling format	a. Address.....
Contact details project	b. Phone.....
	c. E-mail.....
Location	a. Country.....
	b. Place (city)
Economic Issues	
1. What was the turnover past year?.....	\$/€
2. a. Do you make a profit?	
<input type="checkbox"/> Yes	
<input type="checkbox"/> No	
b. If no, do you expect to make a profit in the future?	
<input type="checkbox"/> Yes, <i>because</i>	
<input type="checkbox"/> No, <i>because</i>	
c. When did you or when do you expect to reach the break-even point?	(Year)
3. Do you expect the expenses per kg jatropha seeds produced to increase or decrease in the future?	
<input type="checkbox"/> Increase,	
<input type="checkbox"/> Decrease	
<i>Explanation</i>	
4. <u>For plantations only</u>	
a. Estimated average investment costs per hectare.....	
b. Estimated average operation costs per hectare per year.....	
5. a. Where do you process the seeds to SVO?	
<input type="checkbox"/> Central processing unit, <i>specify location</i>	
<input type="checkbox"/> Decentralized processing unit(s) <i>specify location(s)</i>	
b. What is the total capacity of the processing unit(s) for SVO?	
.....in kg dry seeds per year	
..... in litre oil per year (indicate filtered / not filtered)	
c. How much SVO did you produce in 2011?	
.....in kg dry seeds per year in 2011	
.....in litre oil per year in 2011 (indicate filtered / not filtered)	
d. How much SVO do you aim to produce when your project reaches full size of operation?	
.....in kg dry seeds per year in 20__	
..... in litre oil per year in 20__ (indicate filtered / not filtered)	
e. Indicate the average conversion costs per litre.....	\$/l SVO
f. How many kilos of seeds do you need to produce one litre of SVO?.....	kg/l

¹ Note: Some general introductory questions were removed from this version only questions related to social and economic issues are included.

g. Indicate conversion efficiency%		
6. a. Do you also produce biodiesel? <input type="checkbox"/> No <input type="checkbox"/> Yes, <i>specify location</i>		
b. What is the total capacity of the processing unit(s) for Biodiesel? .....in kg seeds / litre oil per year in litre oil per year		
c. How much biodiesel did you produce in 2011? .....in kg seeds /litre oil per year in 2011 in litre oil per year in 2011		
d. How much biodiesel do you aim to produce when your project reaches full size of operation? .....in kg seeds per year in 20__ in litre oil per year in 20__		
e. Indicate the average conversion costs per litre.....\$/l biodiesel		
f. How many litres of SVO do you need to produce one litre of biodiesel?.....l		
g. Indicate average conversion efficiency.....%		
h. What raw materials or chemicals do you use for the conversion to biodiesel and what are the costs per year / kg and the quantity used? (Methanol, caustic soda etc.)		
7. Indicate total investment costs for the processing factory SVO production.....\$ / € Biodiesel production.....\$ / €		
8. a. What was the expected yield for matured trees (in kg dry seeds/ha/yr or kg dry seeds/tree/yr) at the beginning of your project? b. Did you adjust these expectations? If yes, why? c. What was the average dry clean seed yield per hectare in 2011?		
9. Please fill the table below for more details.		
Revenue	Amount	Unit
Revenue for processor per litre SVO		\$/l
Revenue for processor per litre biodiesel		\$/l
Benefits from cleared land?		\$/ha
Price paid for seeds to farmer? (indicate in which year this price was paid) (farm gate price)		\$/kg dry seed
Price paid for seeds to collectors (wholesale dealer price)		\$/kg dry seed
Price paid for seeds at factory gate		\$/kg dry seed
What was the price at the start of your project		
Did the price change over the years?	<input type="checkbox"/> Yes, <i>explain</i> <input type="checkbox"/> No	
Selling price oil (SVO) at factory gate		\$/l
Selling price for biodiesel at factory gate		\$/l
Selling price for seedcake		\$/kg
Other, <i>specify</i>		
10. What was the retail price of fossil diesel over the same period in the area? Specify the location (city, village) to which this price applies.		
Food Security		
11. a. Did you project have a positive impact on food security? <i>Please explain.</i> b. What were positive impacts of your project on food security? c. Do you provide training for farmers on food crop cultivation?		

- No
 Yes, *explain*
- d. Is land that belongs to the project partly cultivated with food crops for employees?
 No
 Yes, *explain*
- e. Is there a significant increase of yield of food crops due to cultivation of jatropha?
 No
 Yes
- f. Other actions to enhance food security?
 No
 Yes, *explain*

12. a. What were negative impacts of your project on food security?
 b. Did workers have less time for household level food production?
 No
 Yes, *explain*
- c. Is the amount of land for food crops diminished?
 No
 Yes, *explain*
- d. Did your project have an effect on food prices?
 No
 Yes, *explain*
- e. Other actions that had a negative effect on food security?
 No
 Yes, *explain*

Local Prosperity

13. What are the most important lessons you have learned on how your project was able to or has influenced local prosperity?

14. Would you, with the knowledge you have gained, still choose for the same business model? Please elaborate, what tips could you provide project developers to take into account.

15. What actions were taken by your project to improve local prosperity? Please fill in the table below.

Actions	Explain
a. How many permanent jobs are created by the project?	
b. How many temporary jobs are created by the project	
c. Education of staff <input type="checkbox"/> Yes <input type="checkbox"/> No	
d. Increased access to energy <input type="checkbox"/> Yes <input type="checkbox"/> No	
e. Increased access to water <input type="checkbox"/> Yes <input type="checkbox"/> No	
f. Increased access to credit <input type="checkbox"/> Yes <input type="checkbox"/> No	
g. Increased access to health care <input type="checkbox"/> Yes <input type="checkbox"/> No	
h. Increased access to education <input type="checkbox"/> Yes <input type="checkbox"/> No	
i. Provision of free inputs such as fertilizers	

<input type="checkbox"/> Yes		
<input type="checkbox"/> No		
j. Increased number of local entrepreneurs (local vendors, transport services etc.)		
<input type="checkbox"/> Yes		
<input type="checkbox"/> No		
k. Does your project make jatropa products locally available? If yes, which products?		
<input type="checkbox"/> Yes		
<input type="checkbox"/> No		
l. Does your project include community projects?		
<input type="checkbox"/> Yes		
<input type="checkbox"/> No		
m. Other, <i>specify</i>		

16. a. What actions were taken by your project that can lead to a decrease of local prosperity?
 b. What is the estimated total of migration workers (both foreign expats and regional migrants)
 c. Is there an exit strategy of the project? Elaborate on the potential impact on land and labour.
 • What happens to the land when your project is forced to stop?
 • What happens to employees / outgrowers when your project is forced to stop?
 d. Is there a change in attitude of the local population (towards e.g. foreign companies)?

Working Conditions

17. a. What are the average hours worked per day per person?.....hr
 b. What are the maximum hours worked per day per person?.....hr/day
 c. What are the average days worked per year?days/year
 d. How much leave time do the employees have?days/year

18. a. Are there differences in wage related to age or gender? Please explain.
 b. Are there differences in working hours related to age or gender? Please explain.

19. Please draw an organization chart of you company / project that include all jobs related to jatropa cultivation, processing etc. Please provide average wage per month for different job categories. If wages are not available, please provide the total number of workers and the labour costs for all employees per year.

20. Does your project provide the following benefits for permanent / casual labourers?

	Permanent contracts	Temporary contracts
<input type="checkbox"/> Wage labour		
<input type="checkbox"/> Job training		
<input type="checkbox"/> Education (school)		
<input type="checkbox"/> Meals		
<input type="checkbox"/> Free Health Care		
<input type="checkbox"/> Contribution to social services		
<input type="checkbox"/> Transport for employees		
<input type="checkbox"/> Safety gear		
<input type="checkbox"/> Other services, <i>specify</i>		

21. Describe your policy on Child Labour....

22. Describe your policy on discrimination (positive and negative).

23. Do you keep records of number of accidents in the work area? If yes, how many accidents have occurred and what kind of accidents?

24. Are employees allowed to form workers unions? And are there workers unions established?

25. Are there other impacts of your project on the welfare of the workers?

Land Ownership and Land Rights

26. a. Has any land been transferred in terms of land ownership?

- No, (proceed with question 82)
- No but land is leased for years
- Yes, land use rights are transferred

b. Who was the previous land owner?

- State /general land
- Village / municipal land
- Private land

c. Where extra efforts made to assess the informal use of the land (pastoralists, hunting and gathering)?

- No
- Yes, specify

d. Did you pay to the end-user and what was the total amount of compensation payment?

- No
- Yes, specify

e. Have you done a stakeholder analysis before engaging in land acquisition procedures?

- No
- Yes, specify who you did involve

f. Did you involve secondary land users like pastoralists?

- No
- Yes, specify

g. Are secondary land users compensated, and how much was the total amount of compensation payment?

- No
- Yes, specify

h. Did people lose access to land? Was this compensated, if yes how? Was the settlement deemed acceptable by all parties?

- No
- Yes, specify

i. What language was used in documents in the acquisition process?

j. Is there any documentation on the land acquisition process provided in the local language?

- No
- Yes, specify

k. How many meetings with the local community were held?

l. Did your project influence land access or land availability in any other way?

- No
- Yes, specify

27. What are the most important lessons that you learned concerning access to land / land acquisition, things that went wrong or tips for other projects to ensure a sustainable process?

28. Does your project influence the access that local people have to land? (e.g. reduction if land no longer belongs to a village, or increased if intercropping is allowed on plantations)

Gender

29. Do you feel gender issues (empowerment of women, women rights, position of women, female headed households' rights, etc.) have changed since the jatropa activities started?

30. a. What are (potential) benefits of your project concerning gender issues?

b. Do you employ women?

- No

Yes

c. If yes, do women have high skilled jobs? If yes, how many out of how many high skilled jobs in total?

No

Yes. Number of woman..... out of high skilled jobs in total

d. Are there special services for women?

No

Yes, *specify*

e. Does your project have an impact on local access to energy on the short term?

Increased

Decreased

Explain.....

f. Does your project have an impact on local access to energy on the long term?

Increased

Decreased

Explain.....

g. Does your project contribute to increased participation of women in decision making processes?

No

Yes, *specify*

h. Other, *specify*.....

31. What are (potential) negative impacts of your project concerning gender issues?

Part II: Questions for smallholders and outgrowers

Contact information	
Name	.....
Phone	.....
Date	..... / ..... / ..... (dd/mm/yyyy)
Region	.....
District	.....
Ward	.....
Village	.....
Subvillage	.....
GPS	.....
Economic issues	
32. a.	What are the revenues of jatropha cultivation in 2011? (Total #kg * price)
b.	What do you do with the revenues of jatropha?
c.	Does jatropha have other benefits besides income? <i>Please explain.</i>
33. a.	Did you receive the initial planting material for free?
	<input type="checkbox"/> Yes
	<input type="checkbox"/> No,
b.	If no, how much did you pay for the planting material?
34. a.	Did you receive extension services (training on jatropha cultivation)?
	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
b.	If yes, who gave you the training?
c.	How often did you receive the service?
d.	If yes, what topics were covered in the training?
	<input type="checkbox"/> Jatropha cultivation
	<input type="checkbox"/> General agricultural practices
	<input type="checkbox"/> Other <i>specify</i>

<p>35. a. Did you purchase any other tools for jatropha cultivation?</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p>b. If yes, specify tools and cost.</p>
<p>36. a. To whom do you sell the jatropha seeds? If you are not selling yet, indicate to whom you intend to sell the seeds.</p> <p>b. Do you have other options available to sell the seeds (other companies)?</p>
<p>37. a. Do you transport the seeds to a collector / collection centre?</p> <p><input type="checkbox"/> No, seeds are collected at home</p> <p><input type="checkbox"/> Yes, individual transport to the collector, <i>specify means of transport</i>.....</p> <p><input type="checkbox"/> Yes, collectively organized transport to the collector, <i>specify means of transport</i>.....</p> <p>b. If no, would you get a higher price if you bring the seeds to the collector or factory gate?</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes, specify price at collector / factory gate.....</p> <p>c. If yes, how much do you pay to transport the seeds per kg or per bag?.....per bag/kg</p> <p>d. If yes, are there price differences between different locations? <i>Please explain</i>.</p>
<p>38. a. Do you use hired labour for jatropha cultivation/harvesting?</p> <p><input type="checkbox"/> No, only family labour</p> <p><input type="checkbox"/> Yes, <i>specify</i> weeks / months per year</p> <p><input type="checkbox"/> Other, <i>specify</i></p> <p>b. For <u>family labour</u>. Do you pay for family labour?</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes, in kind (housing, food)</p> <p><input type="checkbox"/> Yes, in cash, <i>specify wage per day/hour/ha</i></p> <p>c. For <u>hired labour</u>. How much do you pay the labourers?</p> <p><input type="checkbox"/>per ha</p> <p><input type="checkbox"/>per hour</p> <p><input type="checkbox"/>per day</p> <p><input type="checkbox"/> Other, <i>specify unit and cost</i></p>
<p>39. Opportunity costs land. If you would rent out the land where you cultivate jatropha what would the revenue be? Please explain and indicate in currency per year.</p>
Food security
<p>40. What was the land occupation before planting jatropha?</p>
<p>41. What other crops do you cultivate (food crops and cash crops)?</p>
<p>42. Do you experience a problem with food crop production as a result of jatropha cultivation?</p>
<p>43. a. Did the time you allocate to food crop production change since you cultivate jatropha?</p> <p><input type="checkbox"/> Yes, <u>less</u> time for food crop cultivation</p> <p><input type="checkbox"/> Yes, <u>more</u> time for food crop cultivation</p> <p><input type="checkbox"/> No, no change in time allocation</p> <p>b. If yes, please explain why you spend more/less time on food crops.</p>
<p>44. Do jatropha cultivation activities interfere with food crop cultivation?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><i>Please explain</i>.....</p>
<p>45. Do you irrigate food crops?</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes, <i>specify source irrigation water</i>.....</p>
<p>46. Do you apply fertilizer to food crops?</p> <p><input type="checkbox"/> No</p>

<input type="checkbox"/> Animal <input type="checkbox"/> Chemical, <i>specify</i> 47. Do you apply (local) pesticides to food crops? <input type="checkbox"/> No <input type="checkbox"/> Yes, local /traditional pesticide, <i>specify name</i> <input type="checkbox"/> Yes, pesticide, <i>specify name</i> 48. How do you cultivate the land? <input type="checkbox"/> By hand <input type="checkbox"/> Animal <input type="checkbox"/> Mechanical
49. Do you harvest enough for your own food consumption the whole year? <input type="checkbox"/> Yes <input type="checkbox"/> No
50. How many months per year do you rely on your own food production?.....months
51. How many months per year do you have to buy food? .....months
52. a. Do you have periods of hunger / food deficits during the year? <input type="checkbox"/> Yes, few months per year <input type="checkbox"/> Yes, few weeks per year <input type="checkbox"/> Yes, few days per year <input type="checkbox"/> No b. Indicate in which period of the year you suffer from food deficits (months).....
53. Is food affordable? <input type="checkbox"/> Yes <input type="checkbox"/> No
54. Do you have enough variety in your food pattern? <input type="checkbox"/> Yes <input type="checkbox"/> No

Part III: Additional questions for outgrowers/smallholders and plantation workers in Mozambique

Food Security
55. What is your perception of food security before jatropha activities? <input type="checkbox"/> A lot worse <input type="checkbox"/> A little worse <input type="checkbox"/> Unchanged <input type="checkbox"/> A little improved <input type="checkbox"/> A lot improved <input type="checkbox"/> I don't know
56. What is your perception of food security after jatropha activities initiated? <input type="checkbox"/> A lot worse <input type="checkbox"/> A little worse <input type="checkbox"/> Unchanged <input type="checkbox"/> A little improved <input type="checkbox"/> A lot improved <input type="checkbox"/> I don't know
57. a. How much was time spent on food production per person/household <i>before</i> the jatropha activities? <i>hours per week</i> b. How much time was spent on food production <i>after</i> the jatropha activities per person/household?

.....hours per week

c. How much time was spent on jatropha production per person/household?

.....hours per week

d. What is the change in time spent on food production per person/household since jatropha activities?

.....hours per week more/less

For plantation workers only

58. a. What are the total expenditures of the household *before* the jatropha activities

.....€/month

b. What are the total expenditures of the household *before* the jatropha activities

.....€/month

c. What is the share of expenditures on food in the household *before* the jatropha activities?

.....€/month

d. What is the share of expenditures on food in the household *after* the jatropha activities?

.....€/month

e. Do you experience problems with competition for labour time for food since you work on the plantation. *Explain.*

f. If you/your household spent less time on food production since you work on the plantation, is this compensated, and how? *Explain.*

Supplementary II: Working Hours and Leave Days Per Project

name of the project	hours worked per day	maximum nr of hours worked/day	hours worked per week (or days)	average days worked per year	leave days/year
Tanzania					
Ta_Pr1	8	12			28
Ta_Pr3	10	13		300 (364)	28
Ta_Pr4	8	8			28
Ta_Pr5	9		45	265	28
TA_PR9	8	8		270	28
Mali					
Ma_Pr1	8	x		226	
MA_PR2	8	8		253	
MA_PR3 ltd	x	x		x	
MA_PR5 ltd	8	9.5		x	
MA_PR4	8	12		140	
Ma_Pr6	n/a	n/a		n/a	
Ma_Pr7	x	x		x	
Mozambique					
Mo_P11	8	8		26 days/month	26
Mo_P12	8		(6)		30
Mo_P13	9	^a		240	30
Mo_P15	5	6			
Mo_P16	8	8	44(5.5)		1st year 12, 2nd year 24 etc.

^a 20 h/month overtime max; Note: Ta_Pr6, Ta_Pr4, Ta_Pr10, Mo_P14 are not included in the table because no information on working conditions was provided/not applicable.

Supplementary III: Overview of the Results of the Data Requirements for the Indicator Land Acquisition Process in Mozambique

Data requirements	MO_PL1	MO_PL2	MO_PL3	MO_PL4	MO_PL5	MO_PL6
Land transferred in terms of ownership	no	no	no	no	no	no
Previous land ownership/user	-	-	-	Tobacco company	State cotton farm	State cotton farm
Assessment of previous land rights	yes	-	yes	yes	-	yes
Assessment of informal use of the land	yes	-	yes	yes	-	yes
Land conflicts	4 families relocated	no	no	After stopping Jatropha activities	no	no
Transparency in process through language use	Portuguese, Makua	-	English, local	Portuguese	-	local
Documentation on the land acquisition process	Only for relocated families agreement	-	no	yes	-	yes
Engagement in stakeholder analysis	yes	-	yes	yes	-	yes
Stakeholders	Project, local government, community	-	Project, local government, community	Project, local government, community	-	Project, local government, community

Supplementary IV: Treatment of Secondary Land Users by the Surveyed Projects in Mozambique

Data Requirements	MO_PL1	MO_PL2	MO_PL3	MO_PL4	MO_PL5	MO_PL6
Change in access to land for secondary land users	no	no	no	yes	-	no
Land compensation secondary land users	-	-	-	-	-	-
Involvement of secondary land users	yes	-	yes	no	-	yes
Identification of secondary land users	yes	-	yes	no	-	yes

Supplementary V: Land Compensation by the Surveyed Projects in Mozambique

Data requirements	MO_PL1	MO_PL2	MO_PL3	MO_PL4	MO_PL5	MO_PL6
Compensation of previous users of the land	yes	-	yes	yes	-	no
Type of land compensation	Monetary	-	material	intangible and material	-	-
Amount of land compensation	3000–11000 Mtc	-	construction material and land clearance	job creation and community development	-	-
ce paid for land	-	-	-	-	-	-

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