

Guide to interviews with producers and agriculture cooperatives

General data/Characterization

Person interviewed in this questionnaire: _____

Title (job description): _____

General aspects

Total area: _____ Total cultivated area: _____

Cultivated area destined for the production of castor oil plant: _____

Average productivity of castor oil plant in the property: _____

Own or leased-land property? _____

Agricultural production for the production of biodiesel: _____

1. How have the producer(s) financed their activities/investments (government, financial service agents, intermediaries, anticipated sales, etc)?
2. Are there any benefits or sector/government programs or policies? Please comment.
3. Have the producer(s) found any difficulty benefiting from these programs? Which are they?
4. Please comment on the current availability of financing.
5. Are there partnership programs or alliance between industries and producers? Please comment.
6. Have the producers been providing raw materials for the biodiesel industry? If not, do they plan to do so? Do you believe that the social stamp has brought or will bring benefits to the agricultural production in this region?
7. Do the producers receive any form of technical assistance? Which one (own, hired, institutional, governmental, association, cooperative, input suppliers, or others)?
8. What is your view of the technical assistance so far? Is it satisfactory? Please comment on this subject.
9. What are the difficulties of this relationship?
10. What kinds of techniques are used for growing castor oil plant? Are fertilizers, soil correctors, and quality seeds used? Are there any alternative cultures (soybean, corn, beans...)? Are alternating crops and/or consortium done?
11. How is the processing of castor beans done? Can it be considered adequate?
12. How are the castor beans stored? Is there enough storage?
13. Does the property use any kind of machinery? Is it owned or outsourced?
14. Do the producers have access to new technologies in the region? Is there any study on the development of enhanced seed variety, differentiated fertilizers, or more advanced equipment, equipment that collaborate with weather forecasting etc.?
15. Why has (have) the producer(s) become interested in producing castor oil plant?
16. Based on the plan developed in the property, do you think the biodiesel segment is interesting?

17. Have the necessities of the biodiesel industry affected the owners' decisions? Which adaptations are required for the positioning of the production unit(s) in the production of castor oil in the biodiesel segment (Personnel training? Hire new workers?) ? Please comment on this subject.
18. How are the proprietaries costs controlled?
19. In your opinion, what are the major problems of the production of oleaginous plants intended for the biodiesel industry? What could be done to improve its efficiency?
20. What is the purpose of processing the castor oil plant seeds? What is the average productivity? What effluents are generated? How are they reused? What improvements could be made in the process?
21. Is there any interest in expanding the production/processing to meet the biodiesel segment demands? If yes, what are the limitations of the productive resources (land, water, specialized labor, reservations, pesticide or agrochemical, processing equipment, etc)?
22. What are the major varieties used in this region? What are their advantages and disadvantages?
23. Is there a necessity for improvement in the varieties of the oleaginous plants used (resistance to diseases, plagues, hot/cold weather, abrasivity, productive potential, maturation, oil content, and etc)?
24. What is the famer negotiation power in terms of the input prices?
25. What is the property management negotiation power in terms of the sale of castor oil plant production?
26. What kind of agents do the producers sell to?
27. Is there any planning on selling before planting/processing?
28. How is the market analysis performed? Are there supply agreements (formal/informal)? If yes, what do they specify (delivery dates, quantity, quality, price...)? Do you consider them fair?
29. What are the risks involved in these agreements? Which is the most dependent party? Why?
30. Are there combined actions among the farmers? Is there a horizontal/vertical arrangement? Please comment.
31. What the most important aspects of the negotiation process between the agriculture representatives and the industry?
32. Are there violations of contracts by the industry? If the claims are rejected, what are the consequences? Please comment on this subject.
33. How is the distribution process done for the industry? Is transportation adequate? Are there any restrictions?
34. Who is the responsible for transporting the raw material to the industry? Is the property responsible for the freight transportation costs to the client?

Guide to interviews with agricultural technicians

General data/characterization

Person responsible for answering this questionnaire: _____

Title (job description): _____

General aspects

Number of properties you have been providing technical assistance to: _____

1. Please comment on the assistance provided to the castor oil plant producers in the region.
2. Who is responsible for the costs of technical assistance (NGOs or input suppliers hired by the industry or by the rural producer? By the association or cooperative etc.?)
3. Do you believe the financial resources provided for technical assistance have been adequate? Please comment on this subject.
4. Do the farmers follow the instructions provided? What are the difficulties of the relationship with the producers?
5. Do you believe that the social seal has brought or will bring benefits to the agricultural production in this region?
6. Please comment on the partnership/alliances between the biodiesel plants and rural producers.
7. In your opinion, what are the major problems of the production of oleaginous plants intended for the biodiesel industry? What could be done to improve its efficiency?
8. What adaptations are required for the positioning of the production unit(s) in the biodiesel segment (personnel training, hire new workers, new techniques)? Please comment on this subject.
9. What are the major varieties used in this region? What are their advantages and disadvantages?
10. What are the limitations of the productive resources (land, water, specialized labor, operational labor, reservations, pesticide or agrochemical, etc)?
11. Based on the plan developed in the property(s), do you think the biodiesel segment is interesting for the producers?
12. Have the necessities of the biodiesel industry affected the producers' decisions? Please comment on this subject.

Guide to interviews with bank professionals

General data/characterization

Institution: _____

Person responsible for this filling out this questionnaire: _____

Title (job description): _____

1. What kinds of loans are available for the small farmer? What kinds of loans are available for the specific production of castor oil plant?
2. Is there any especial loan for the biodiesel program? What kind of oleaginous plants have been considered?
3. What are the difficulties for the producer to be granted a loan? What could be done to change this scenario?
4. Which kind of credit do the producers need (investment, funding, commercialization)? Where have they been adequately applied?

Guide to interviews with biodiesel plants' representatives

General data/characterization

Institution: _____

Professional interviewed: _____

Title (job description): _____

General aspects

Area covered by the company facility: _____

Facility area authorized by the National Petroleum Agency (NPA): _____

Biodiesel production: _____

Biodiesel production from castor oil: _____

1. How has the devaluation of petroleum prices affected the company planning? Please comment on this subject.
2. Does the company believe that the social seal has brought or will bring benefits to the company? Please comment on this subject.
3. Considering the exemption of social seal taxes, are the costs of meeting the criteria affordable for the production of castor oil plant arrangements? Please comment on this subject.
4. Considering the process of castor oil plant seeds, what are the technological limitations? What is the technological level of the company compared to that of the market?
5. What are the major quality indexes monitored in the castor oil seeds? Why? Who analyzes and certifies them?
6. Does the company have adequate laboratories to monitor the raw material and final products quality? What difficulties have been found?
7. What are the difficulties to conform the biodiesel from castor oil plant to the NPA norms? What is the current amount (%) of castor oil plant added to the blend?
8. In your opinion, what are the major problems of the production of oleaginous plants intended for the biodiesel industry? What could be done to improve its efficiency?
9. How does the company have access to new technology? (Are there any studies on the development of varieties of improved seeds, differentiated fertilizers, more advanced equipment, or equipment for weather forecast, etc?)
10. How are the R&D projects financed?
() Own financial resources () Buyer () Supplier () Others: which are they? _____
11. What are the major residues generated by the company? What are their main applications? Are you satisfied with their use? Is there any study on a more profitable option for these residues being carried out?
12. How are the company's social projects managed?
13. Please comment on the difficulties to meet the social seal criteria.
14. Is there any interest in expanding the production of biodiesel? If yes, what are the limitations of the productive resources (supply, land, water, specialized labor, operational labor, reservations, pesticide or agrochemical, alcohol, catalyst, etc)?

15. What is the contribution of each input to the final biodiesel price?
16. What are the major quality indexes monitored of the castor oil acquired? Who analyzes and certifies them?
17. What is the company negotiation power in terms of the input prices?
18. What is the company negotiation power in terms of the sale of castor oil plant production?
19. Are there supply agreements (formal/informal)? If yes, what do they specify (delivery dates, quantity, quality, price...)? Do you consider them fair? Are there agreement violations by one of the parties? What are the circumstances and consequences? What is the punishment due to an agreement violation?
20. What are the risks involved in the contracts? Which is the most dependent party? Why?
21. What are the most important aspects of the negotiation process with the family farmer?
22. Does the acquisition of raw material by the industry have structural limitations? Please comment.
23. What is the products' distribution channel like?
24. Considering the responsibility of the storages, do you believe they are adequate for the production? Are they enough?

Guide to interviews with the ricinochemistry company

General data/characterization

Institution: _____

Person responsible for this filling out this questionnaire: _____

Title (job description): _____

General aspects

Area covered by the company facility: _____

Oil production: _____

1. What is your opinion about the insertion of the castor oil plant into the National Program for the Production and Use of Biodiesel?
2. Has the company had difficulties acquiring castor oil plant in the market? Please comment on this subject.
3. Has the company had to import castor oil to meet its demand?
4. In your opinion, what are the major problems of the production of oleaginous plants intended for the ricinochemistry industry? What could be done to improve its efficiency?
5. Do the castor oil plants acquired from family producers (in general) or from the biodiesel industry (in the case of social projects) satisfy the quality standards expected by the company? What difficulties have been found?
6. What reasons justify the large price fluctuation of the castor oil plant in the market in the last years?
7. What kind of payment system is used to pay for the castor oil plant acquired from the company?
8. Is there any planning on purchasing before production? Are there supply agreements (formal/informal)? If yes, what do they specify (delivery dates, quantity, quality, price)?
9. Are there agreement violations by one of the parties? What are the circumstances and consequences?
10. Is there any incentive from the company to strengthen family farmers' organizations? Which are they? If not, what could be done in order to motivate this mobilization?