

Appendix 2. Survey to elicit landowners' preferences for program options to protect and manage forests in Salta

INSTRUCTIONS

This survey will ask you your opinion and preferences regarding options for protecting and using forests in Salta / Chaco province. There are no right or wrong answers. I am only interested in knowing your true opinions and preferences. The findings of this research will help me to provide recommendations to government and non-government agencies on how to protect and use forests in accordance with citizens' interests and preferences.

I. GENERAL QUESTIONS ABOUT YOUR LAND

1. I'd like to start by asking you whether or not you own more than one parcel of land in the Chaco forest of Salta province.

- Yes
- No → *Go to question 3*

2. How many parcels of land do you own in the Chaco forest of Salta province?

For this survey, I want you to focus on the parcel located... [show map of the study landscape]

3. What is the size of your parcel?

Hectares

Do not recall/ know

4. How many hectares of your parcel(s) have forest?

Hectares

Do not recall/ know

II. QUESTIONS ABOUT THE FOREST LAW

To encourage protection of native forests, in 2007 the national government created the Act of Minimum Provisions for the Environmental Protection of Native Forests. This act is commonly known as the Forest Law.

5. Are you familiar with the Forest Law?

- Yes
- No → *Go to next section*

6. Are you familiar with the categorization of lands into red, yellow, and green zones under the Forest Law?

- Yes
- No → *Go to question 8*

7. In which category was your parcel categorized? *Select one option*

Yellow	Green	Yellow & Green	Yellow & Red	Green & Red	Yellow, Green & Red	Do not recall
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To guarantee the protection of forest, the Forest Law has created a national fund to compensate those landowners who protect native forests on their properties.

8. Have you heard about the availability of funding under the Forest Law?

- Yes
- I am not sure → *Go to next section*
- No → *Go to next section*

9. Have you ever submitted a plan requesting funding from the Forest Law?

- Yes
- I am not sure/do not recall → *Go to next question*
- No → *Go to next question*

10. Have you ever submitted a plan without requesting funding from the Forest Law?

- Yes
- I am not sure/do not recall → *Go to next section*
- No → *Go to next section*

11. What type of plan did you submit?

- Conservation Plan
A conservation plan allows landowners to engage in activities that do not reduce the amount of forest on their land, and which protect native plants, trees, and forest animals. For example, landowners who have enrolled in a conservation plan are allowed to use their forests for scientific research or to preserve the forest.
- Sustainable Management Plan
A sustainable management plan allows landowners to engage in activities that do not negatively impact native plants, trees, and forest animals on their lands, the productivity of the forest, and the environmental services provided by the forest (e.g. water and air purification). For example, landowners who have enrolled in a sustainable management plan are allowed to use their forest for ecotourism or sustainable timber harvesting.
- A combination of both plans
- A Formulation Plan
A formulation project is designed to make a list of the number and type of plants, trees, and forest animals on a landowner's property, in order to develop a conservation plan or a sustainable management plan.

III. YOUR PREFERENCES FOR FOREST CONSERVATION

Now, I would like to know your opinion regarding several potential programs to conserve forest on your land.

12. How interested are you in each of the following options?

	Very uninterested	Somewhat interested	Neutral	Somewhat interested	Very interested
1) Selling a portion of your land to create a national park or a reserve.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Obtaining a property tax reduction in exchange for conserving the forest on your land. <i>This means that you will pay lower property taxes on the land that you conserve.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Selling your right to harvest timber, raise cattle, or grow crops on a portion of your land in perpetuity. You would receive a lump-sum payment for selling these rights. <i>This means that neither you, nor your heirs, nor a new owner will be able to use that land in the future for timber harvesting, cattle raising, and agriculture. This does not prevent you from mortgaging, selling, or passing on your land to another owner.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Donating your right to harvest timber, raise cattle, or grow crops on a portion of your land in perpetuity. This is a voluntary decision. You would receive no payment. <i>Neither you, nor your heirs, nor a new owner will be able to use that land in the future for timber harvesting, cattle raising, and agriculture. This does not prevent you from mortgaging, selling, or passing on your land to another owner.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5) Participating in a program that provides you with money to help you protect or sustainably use the forest on your land.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Which of those options do you like most?

- Sell a portion of your land to create a national park or a reserve → **go to block A**
- Obtain a property tax reduction → **go to block B**
- Sell the use rights for a portion of your land → **go to block C**
- Donate the use rights for a portion of your land → **go to block D**
- Participate in a program that provides you with money to help you protect or sustainably use the forest on your land → **go to section IV**
- None of them → **14. What are the reasons? go to section V**

BLOCK A – Sell hectares

15. Would you be willing to sell a portion of your land for USD XX per hectare to create a national park or a reserve?

Select one option

- Yes → **Go to question 17**
- No → **16. What are the reasons? → Then, go to section V**

17. How many hectares would you sell at that price?

If respondent does not sell ALL the hectares, go to next question. Otherwise, go to section V

18. Now, I will show you a map of your land. I got this map from a geospatial processing program. I would like to mark the location of the hectares that you would enroll in this program. The purpose of this map is to assess how connected different pieces of forested land are.

Show map with parcel

19. What activities will be performed in the remaining portion of your land?

Select all that apply

- Agriculture (soybeans, wheat)
- Cattle raising
- Harvest of non-timber forest products such as honey and medicinal plants
- Timber extraction
- Nothing
- It is used by ancestral occupants
- Other: _____

Go to Section IV

BLOCK B – Tax exemption

20. Currently, how much in property taxes do you pay on your land?

Annually (\$)	Monthly (\$)

Do not recall/ know

21. Would you be willing to accept an annual property tax reduction of XX% per hectare in exchange for conserving the forest on your land?

Select one option

- Yes → *Go to question 22*
- No → **22. What are the reasons?** → *Then, go to section V*

23. How many years would you enroll in a program that offers this property tax reduction?

Select one option

- Less than 5 years
- 5 – 9 years
- 10 – 14 years
- 15 – 29 years
- 30 – 45 years
- More than 45 years

24. How many hectares would you enroll in this program?

If respondent do not enroll ALL the hectares, go to next question. Otherwise, go to section V

25. Now, I will show you a map of your land. I got this map from a geospatial processing program. I would like to mark the location of the hectares that you would enroll in this program. The purpose of this map is to assess how connected different pieces of forested land are.

Show map with parcel

26. What activities will be performed in the remaining portion of your parcel?

Select all that apply

- Agriculture (soybean, wheat)
- Cattle raising
- Harvest of non-timber forest products such as honey and medicinal plants
- Timber extraction
- Nothing
- It is used by ancestral occupants
- Other: _____

Go to Section IV

BLOCK C – Sell use rights

The use rights of your land may be sold to a governmental entity or to a non-governmental organization. This organization would visit your property each year to ensure that the land is not being used for timber harvesting, cattle rising, or agriculture.

27. How interested are you in selling the use rights of your land to...?

	Very uninterested	Somewhat uninterested	Neutral	Somewhat interested	Very interested
A provincial governmental entity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A national government entity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A non-government organization such as a foundation or association.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

28. Would you be willing to sell the use rights (timber harvesting, cattle raising, and agriculture) on a portion of your parcel for a lump-sum payment of USD XX per hectare?

Select one option

- Yes → *Go to question 30*
- No → **29. What are the reasons?** → *Then go to section V*

30. How many hectares would you be willing to enroll in this program?

If respondent do not sell ALL the hectares, go to next question. Otherwise, go to section V

31. Now, I will show you a map of your land. I got this map from a geospatial processing program. I would like to mark the location of the hectares that you would enroll in this program. The purpose of this map is to assess how connected different pieces of forested land are.

Show map with parcel

32. What activities will be performed in the remaining portion of your land?

Select all that apply

- Agriculture (soybean, wheat)
- Cattle raising
- Harvest of non-timber forest products such as honey and medicinal plants
- Timber extraction
- Nothing
- It is used by ancestral occupants
- Other: _____

Go to section IV

BLOCK D – Donate use rights

The use rights of your land may be donated to a governmental entity or to a non-governmental organization. This organization would visit your property each year to ensure that the land is not being used for timber harvesting, cattle rising, or agriculture.

33. How interested are you in donating the use rights of your land to...?

	Very uninterested	Somewhat uninterested	Neutral	Somewhat interested	Very interested
A provincial governmental entity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A national government entity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A non-government organization such as a foundation or association.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

34. How many hectares would you be willing to enroll in this program?

If respondent do not donate ALL the hectares, go to next question. Otherwise, go to section V

35. Now, I will show you a map of your land. I got this map from a geospatial processing program. I would like to mark the location of the hectares that you would enroll in this program. The purpose of this map is to assess how connected different pieces of forested land are.

Show map with parcel

36. What activities will be performed in the remaining portion of your land?

Select all that apply

- Agriculture (soybean, wheat)
- Cattle raising
- Harvest of non-timber forest products such as honey and medicinal plants
- Timber extraction
- Nothing
- It is used by ancestral occupants
- Other: _____

Go to section IV

IV. YOUR PREFERENCES REGARDING THE FOREST LAW FUNDING

The Forest Law in Argentina offers different ways in which you could protect or sustainably use the forest on your property without deforesting it. These forest uses would allow you to receive an annual payment from the government. I would like to show you 5 of these forest uses. They are printed on this card [*Show Card A*].

- Conserve forest as it is now: This means that you could conduct activities to maintain the forest in your land in the same or better condition as it is now. Some examples are: to keep cattle out of your forest or to plant local trees such as 'Algarrobo', 'Palo Santo', 'Quebracho Colorado' or 'Blanco'.
- Ecotourism: This means that you could conduct tourism activities that do not harm the forest on your land. Some examples are: horse riding and bird watching activities.
- Sustainable timber harvesting that protects local trees: This means that you could harvest timber from your land as long as the number of native trees planted on your land exceeds the number of trees harvested every year.
- Silvo-pasture: You can raise cattle and harvest timber at the same time on your land, as long as these activities do not cause overgrazing and overharvesting of the land.

To answer the questions in this section, please assume that current land-use restrictions or the category of your land no longer exist. You would be free to use your land as you preferred without restrictions.

37. Which of these forest uses would you like to adopt within the next 3 years?

Select all that apply

- Conserve forest as it is now
- Ecotourism
- Sustainable timber harvesting that protects local trees
- Silvo-pasture
- None

Now, I would like to ask you 4 more questions that are related to the Forest Law. You will be presented with different programs that provide you with an annual payment for protecting or sustainably using the forest on your property. The programs are printed on this card [*Show Card B*]. Each program will range from 5 to 25 years in length. You would receive an annual payment per hectare of land enrolled in the program for each year that you remain in the program. These payments would be made in the same month every year. There would be no delay in payment. You would pay a penalty if you decide to withdraw early from the program.

38. Would you choose to enroll in either of these 2 programs, or would you prefer not to enroll in a forest protection program?

(1)	PROGRAM A	PROGRAM B	
Forest Use	Conserve forest as it is now	Ecotourism	
Contract Length	25 years	5 years	
Annual Payment	US\$ 12 / hectare	US\$ 22 / hectare	
<i>I would choose:</i>	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> None
<i>If A or B was chosen, ask the questions below</i>			<i>Skip to question 41</i>
<p>39. How many hectares would you enroll under the option you chose?</p> <input style="width: 50px; height: 20px;" type="text"/> <p><i>If respondent do NOT enroll ALL the hectares, go to next question. Otherwise, go to next choice-question</i></p> <p>40. Now, I will show you a map of your land and I would like to mark the location of the hectares you would enroll in this program.</p> <p><i>Show map with parcel</i></p>			

41. Would you choose to enroll in either of these 2 programs, or would you prefer not to enroll in a forest protection program?

(2)	PROGRAM A	PROGRAM B	
Forest Use	Silvo-pasture	Sustainable timber harvesting	
Duration	25 years	15 years	
Payment	US\$ 22 / hectare	US\$ 32 / hectare	
<i>I would choose:</i>	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> None
<i>If A or B was chosen, ask the questions below</i>			<i>Skip to question 44</i>
<p>42. How many hectares would you enroll under the option you chose?</p> <input style="width: 50px; height: 20px;" type="text"/> <p><i>If respondent do NOT enroll ALL the hectares, go to next question. Otherwise, go to next choice-question</i></p>			

43. Now, I will show you a map of your land and I would like to mark the location of the hectares you would enroll in this program.

Show map with parcel

44. Would you choose to enroll in either of these 2 programs, or would you prefer not to enroll in a forest protection program?

(3)	PROGRAM A	PROGRAM B	
Forest Use	Sustainable timber harvesting	Conserve forest as it is now	
Duration	15 years	5 years	
Payment	US\$ 12 / hectare	US\$ 32 / hectare	
<i>I would choose:</i>	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> None
<i>If A or B was chosen, ask the questions below</i>			<i>Skip to question 47</i>
<p>45. How many hectares would you enroll under the option you chose?</p> <p><input type="text"/></p> <p><i>If respondent do NOT donate enroll the hectares, go to next question. Otherwise, go to next choice-question</i></p> <p>46. Now, I will show you a map of your land and I would like to mark the location of the hectares you would enroll in this program.</p> <p><i>Show map with parcel</i></p>			

47. Would you choose to enroll in either of these 2 programs, or would you prefer not to enroll in a forest protection program?

(4)	PROGRAM A	PROGRAM B	
Forest Use	Ecotourism	Silvo-pasture	
Duration	5 years	25 years	
Payment	US\$ 22 / hectare	US\$ 2 / hectare	
<i>I would choose:</i>	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> None
<i>If A or B was chosen, ask the questions below</i>			<i>Skip to question 50</i>
<p>48. How many hectares would you enroll under the option you chose?</p> <p><input type="text"/></p> <p><i>If respondent do NOT enroll ALL the hectares, go to next question. Otherwise, go to next choice-question</i></p>			

49. Now, I will show you a map of your land and I would like to mark the location of the hectares you would enroll in this program.

Show map with parcel

If respondent NEVER chose a program:

50. What is the main reasons why you did not choose any program?

Mark one option

- I am not interested in conserving the forest on my land.
- I am not planning to own forested land in future.
- The payments are not high enough to compete with other land-use alternatives.
- It is not feasible to conduct the proposed forest uses on my land.
- The length of the participation commitment is too long.
- I do not trust conservation organizations
- I do not trust the government
- Other: _____

Go to Question 54

If respondent DO NOT ENROLL all the hectares:

51. What activities will be performed in the remaining portion of your land?

Select all that apply

- Agriculture (soybean, wheat)
- Subsistence agriculture
- Cattle raising
- Subsistence livestock raising
- Extraction of non-timber forest products
- Timber extraction
- Nothing
- It is used by ancestral occupants
- Other: _____

52. Currently, the money that the Forest Law gives to those landowners who sustainably use the forests on their lands can only be spent on government-approved activities. The money can be spent on counting the number of trees and animals on the property, and improving the quality of the forest by fencing the forest and planting trees.

Would you prefer that there are no restrictions on how the money can be used?

- Not sure/ I do not know
- No
- Yes → **53. How would you prefer to use the money?**

Go to Question 54

54. Now, please, I would like your opinion regarding this section.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The questions were difficult to answer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My responses accurately reflect my preferences for enrolling in a forest conservation program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

V. YOUR REASONS FOR KEEPING FOREST ON YOUR LAND

Now, I'm going to read out a few statements. They are printed on this card [*Show Card C*].

55. I would like you to tell me how important are they as reasons for why you have forest on your land.

I have forest on my land:

	Very unimportant	Unimportant	Neutral	Important	Very important
To protect nature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To enjoy scenery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To pass forested areas onto my heirs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To provide shade to livestock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For timber production	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Because my land is unsuitable for agriculture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To obey the Forest Law	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Because forests are a financial investment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VI. YOUR ATTITUDES TOWARDS PROGRAM ADOPTION

I would now like to ask you about your attitudes towards program support. I'm going to read out again a few statements. They are printed on this card [*Show Card D*].

56. I would like you to tell me how much you agree or disagree with them.

	Very disagree	Disagree	Neutral	Agree	Very agree
1. The government should be able to regulate the use of forests located on private land.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. The government should have the right to tell private forest owners how to manage their forests.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. There should be regulations regarding the cutting of trees on private forestland.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. The government should fine private forest owners who fail to practice forest protection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. There should be financial incentives, such as subsidies, to encourage private forest owners to practice forest protection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. The government should conduct workshops on forest protection techniques for private forest owners.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. The government should promote understanding of forest protection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. The government and private forest owners should work together toward forest protection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. The government should use positive images, such as Tatu Carreta or Oso Hormiguero, to promote forest protection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. The government should use negative images, like floods and mudslides, to show the negative consequences of not protecting forests.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII. QUESTIONS ABOUT YOU

Finally, I would like to know some details about you. This information is used only to run statistical models to understand which types of landowners prefer which type of forest protection programs and will be treated with confidence.

57. Which category of landowner are you?

Select one option

- Individual → *Go to Block E*
- Cacique or President of an indigenous community → *Go to Block F*
- Private company → *Go to Block G*
- Governmental institution → *End*
- Non-profit organization → *End*

BLOCK E – Individual

58. Which is your main income activity?

Select all the options that apply

- Retirement or Employee
- Agriculture
- Ranching
- Timber

- Financial and insurance services
- Real State
- Legal services
- Other professional, scientific, or technical services
- Other activity: _____

59. What is your age?

Select one option

- under 21 years
- 21 to 25 years
- 26 to 35 years
- 36 to 45 years
- 46 to 55 years
- 56 to 65 years
- older than 65 years

60. What is your highest level of education?

Select one option

- Elementary incomplete
- Elementary complete
- High school incomplete
- High school complete
- Titulo terciario no universitario incomplete
- Titulo terciario no universitario complete
- Titulo universitario de grado incomplete
- Titulo universitario de grado complete
- Titulo universitario de posgrado incomplete
- Titulo universitario de posgrado complete

BLOCK F – Indigenous community

61. What is your age?

Select one option

- under 21 years
- 21 to 25 years
- 26 to 35 years
- 36 to 45 years
- 46 to 55 years
- 56 to 65 years
- older than 65 years

62. What is your highest level of education?

Select one option

- Elementary incomplete
- Elementary complete
- High school incomplete
- High school complete
- Titulo terciario no universitario incomplete
- Titulo terciario no universitario complete
- Titulo universitario de grado incomplete
- Titulo universitario de grado complete
- Titulo universitario de posgrado incomplete
- Titulo universitario de posgrado complete

BLOCK G – Company

63. Which is the main income activity of the company?

Select all the options that apply

- Agriculture
- Ranching
- Timber
- Manufacturing industry

- Wholesale and retail
- Services de transport, automotive, accommodation, food, or communications
- Financial and insurance services
- Real Estate services
- Legal services
- Accounting or business services
- Other activity: _____

Thank you.