Appendix I, Samenvatting

Het hoofddoel van dit onderzoek was om te onderzoeken hoe de ‘household water security’ in Santa Cruz Papalutla en Santa María del Tule verhouden tot hun ligging in de ‘urban fringe’ of Oaxaca de Juárez. Ieder huishouden ontwikkeld zijn eigen ‘water security strategy’ in een multidisciplinair veld van actoren en processen. De ‘urban fringe’ is bovenal een dynamiche veld, omdat het een ontmoetingsplek is tussen rurale en urbane samenleving. Centraal in dit onderzoek staan de voornamelijk op Oaxaca de Juárez gerichte gemeente Santa María del Tule en de meer rurale Santa Cruz Papalutla. Om de invloed van de positie in de ‘urban fringe’ op de ‘water security’ van de huishoudens in de twee gemeenten te kunnen verklaren maakt het onderzoek van de ‘Household Water Security Model’. Het model is gebaseerd op de multidisciplinaire ‘household water security model’ van Webb en Iskandarani, zoals ontwikkeld voor de kritische analyse van internationaal water beleid. In hoofdlijn volgt het aangepaste model de gedachten van Webb en Iskandarani (‘household water security’ hangt af van de ‘avialability’, ‘accessibility’ en ‘entitlement’ van een huishouden tot water), maar een huishouden wordt meer gezien als deelnemer in een wijdere context. Het gevolg hiervan is onder andere dat het makkelijker is om de ‘urban fringe’ te betrekken in het model. De combinatie van de twee geeft, na grondige analyses van de huishoudens, betrokken actoren en de lokale context, uiteindelijk antwoorden op de vraag hoe de ‘household water security’ binnen Santa Cruz Papalutla en Santa María del Tule verhouden tot de positie in de ‘urban fringe’ of Oaxaca de Juárez.

Appendix II, Survey questionnaire

English translation of the survey as taken within the municipalities of Santa Cruz Papalutla and Santa María del Tule.

Household ID (to be filled in by the interviewer):…….

Date:……..

Family name:…….

Address:…….

Number of household members:……

1. Does the household own land for agricultural use? Yes ☐

   No ☐ (go to question 4)

2. Which type(s) of irrigation does the household use on its land?

   Canal irrigation ☐ (go to question 4)

   Well irrigation ☐

   Floodwater irrigation ☐ (go to question 4)

   Water table farming ☐ (go to question 4)

3. Which method(s) does the household use to extract water from its well(s)?

   Electrical water pump ☐

   Gasoline water pump ☐

   Bucket ☐

4. From what economic activity(ies) does the household derive its income(s)?

5. Does the household have a drinking-water tap?

Yes ☐

How many:.....

No ☐

6. Does the household use any other water resource(s) than water from the public drinking-water infrastructure?

Yes ☐

Which resource(s)?:……

No ☐

7. Is the floor of the house cleaned with water, and if so, how often?

Yes ☐

How many times?:.....

No ☐

8. On which household activity is water consumption being cut first, during times of water shortages?

Cleaning of the house ☐

Drinking-water ☐

Cooking ☐

Washing clothes ☐

Washing the body ☐

Drinking-water of animals ☐

Water for plants ☐

Other, namely:……

9. If the state government would offer more and cleaner drinking-water for a higher price, would the household then pay this new price? Yes ☐

☐ No

Thank you for your attention.

Appendix III, In-depth interview questionnaire

English translation of the structured interview questions as taken in the municipalities of Santa Cruz Papalutla and Santa María del Tule.

Household ID (to be filled in by the interviewer):.....

Date:.....

Interview number:.....

Identification of the household:.....

Family name:.....

Address:.....

1. Questions about the household situation.

Names of household members.	Age and gender.	Civil status.	Member of water commission.	Type of work in municipality.	Type of work outside municipality and place of work.

2. Does the household own land for agricultural use? (is the answer no, then go to question 7)

3. Questions about the household agricultural situation.

Plot ID	Size of each plot in hectares.	Type of applied irrigation.	Owning status of each plot.	Cultivated product(s) on each plot.	No. of wells on each plot.

4. Questions about the wells on the agricultural land of the household.

Well number	Accessory agricultural plot size (Ha.)	Well depth 2004 in (meters)	Construction material of the shaft	Average water table during the dry season of 2003/2004 (meters).	Average water table during the wet season of 2003 (meters).	Method used for getting the water out of the well.	Pump capacity in wet season (litres per minute).

5. How will agricultural production be secured when there is a water shortage during the wet season?

6. Does the household have any other sources of income?
    - Cestería
    - Tourism
    - Music
    - Restaurant
    - Pharmacy
    - Other
    - No other sources.

7. Does the household have a connection with the municipal drinking-water pipe, and how many connections?

8. Is the water from the pipe clean enough to drink?

9. How much does the household pay for the use of this drinking-water connection?

10. How is the usage of the drinking-water pipe being paid?
    - Regularly (each month)
    - Regularly (each half year)
    - Irregularly
    - Other

11. What amount of money must be paid for drinking-water, and is the households able to pay this amount?

12. When the state government would offer more and cleaner drinking-water on a regular baze for a higher (more then twenty pesos per month) price, would the household then pay for the higher price?

13. Are there any other water resources which the household is using within the house?
    - Water from the wells on the countryside.
    - Water from the river.
    - Water bottles.
    - Other
    - No other resources.

14. Is the water from these resources clean enough to drink?

15. What is the average amount of water that the household is using each day?

16. For which daily activities within the house, is water being used?

17. What average amount of water is being used for those activities?

18. What does the household do when there are periods of water shortages?

19. How will the availability of drinking-water be in ten years from now, and will the household then be able to secure its water needs?

Remarks**:**.....
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