# APPENDIX

Table 1 : Determinants of rice consumption by T1 treatment adoption

| Total rice consumption per household | Coef | Error.standard | t | p>|t| |
|---|---|---|---|---|
| T1 | -17,528 *** | 2,994 | -5,85 | 0,000 |
| Nbre_parcelle | 0,715 | 0,799 | 0,89 | 0,372 |
| Actv_prin | 1,232 | 3,890 | 0,32 | 0,752 |
| Feminine | 0,220 | 3,890 | 0,06 | 0,954 |
| Bachelor | -4,932 | 9,951 | -0,50 | 0,620 |
| Marié_monogame | 6,041 * | 3,514 | 1,72 | 0,086 |
| Marié_polygame | 7,709 ** | 3,636 | 2,12 | 0,034 |
| Literacy | -3,689 | 5,175 | -0,71 | 0,476 |
| Aucune_éducation_form | -0,560 | 4,131 | -0,14 | 0,892 |
| Main_oeuvre | 0,061 *** | 0,018 | 3,40 | 0,001 |
| Age_cm | -0,024 | 0,077 | -0,31 | 0,754 |
| Saison_cult | 18,586 *** | 4,998 | 3,72 | 0,000 |
| Tail_ménag | 1,854 *** | 0,196 | 9,46 | 0,000 |
| Against | 42,793 *** | 7,069 | 6,05 | 0,000 |

Note : significance level 1%; 5% and 10% respectively for ***; ** and *. Source : Authors, based on data from DAPSA and AHS (2017). Number of observations = 747, Prob>F=0.000 R squared = 0.2274, R squared = 0.2115.

   Analysis of this table shows that there are 747 observations and that the model is overall significant at the 1% level with an adjusted R of 0.2112. These results show that the adoption of fertilizers (NPK and urea) has a negative impact on the monthly amount of rice consumed at the 1% threshold.  The Status marital depicted by the variables "marié_monogame" and the "marié_polygame" has a positive and significant effect on the amount of rice consumed by the household during the month at the 10% and 1% thresholds. We find that when the head of the household is a monogamous married man, his monthly rice consumption increases by 6 kg, while if he is polygamous, his consumption increases by 7 kg. These results imply that

households with a married head of household have a higher rice consumption than unmarried households.

The positive and significant effect of household size on the amount of rice consumed also confirms the important place of rice in Senegal's dietary habits. The "main_ work" variable also contributes significantly, to the tune of 6.1 kg, to the amount of rice consumed by households. Similarly, variable tail_ménag has a significant effect on household rice consumption. The latter increases consumption by 1.85 kg.

Table 2: Determinants of rice consumption by T2 treatment adoption

| Total rice consumption per household | Coef | Error.standard | T | p>\|t\| |
|---|---|---|---|---|
| T2 | 2,36 | 3,08 | 0,77 | 0,443 |
| Nbre_parcelle | 0,36 | 0,74 | 0,49 | 0,626 |
| Actv_prin | -0,36 | 3,11 | -0,12 | 0,907 |
| Feminine | -7,42 ** | 3,52 | -2,11 | 0,035 |
| Bachelor | -10,99 | 8,26 | -1,33 | 0,184 |
| Marié_polygame | -9,01 *** | 2,31 | -3,89 | 0,000 |
| Main_oeuvre | 0,08 | 0,02 | 3,21 | 0,001 |
| Age_cm | -0,11 | 0,07 | -1,48 | 0,140 |
| Tail_ménag | 1,22 *** | 0,18 | 6,68 | 0,000 |
| Against | 68,31 *** | 6,45 | 10,59 | 0,000 |

Note : significance level 1%; 5% and 10% respectively for ***; ** and *.

The results in this table show that the main determinants of the adoption of the T2 treatment on total rice consumption are the variables "Female", "marié_polygame" and "tail_ménage". Analysis of the results reveals that the variables "Female" and "marié_polygamme" have a negative effect on total household rice consumption, while household size has a positive effect.

Table 3 : Determinants of rice consumption by T3 treatment adoption

| Consumption Total Rice in the Household | Coef | Error.standard | t | p>\|t\| |
|---|---|---|---|---|
| T3 | -16,74 | 13,01 | -1,29 | 0,199 |

| Nbre_parcelle | 1,05 | 0,72 | 1,45 | 0,149 |
|---|---|---|---|---|
| Actv_prin | 1,32 | 2,98 | 0,44 | 0,657 |
| Feminine | -13,63 *** | 4,87 | -2,80 | 0,005 |
| Bachelor | -13,53 | 8,36 | -1,62 | 0,107 |
| Marié_polygame | -4,38 | 5,15 | -0,85 | 0,396 |
| Age_cm | -0,14 ** | 0,07 | -1,98 | 0,049 |
| Tail_ménag | 1,07 *** | 0,17 | 6,24 | 0,000 |
| Against | 71,80 *** | 7,69 | 9,33 | 0,000 |

<u>Note</u> : significance level 1%; 5% and 10% respectively for ***; ** and *.

Estimating the uptake of T3 treatment shows that variables such as "female", "age_cm" and "taill_ménag" have a significant effect on total household rice consumption. Indeed, most variables negatively affect total consumption, with the exception of the variable "taill_ménag" which has a positive impact on consumption.