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Electronic Appendix: Methods

Methodology of cluster analysis

The Cluster Analysis was conducted via analyzing data from TFO's Socio-Economic Baseline Survey (SEBS) with the software package SPSS 19, using Two-Step Cluster Analysis. The chosen measure of distance was log-likelihood, the cluster criterion BIC. For Seronga, the analysis yielded a relatively high silhouette coefficient (0.85). For both Mashare and Cusseque, the silhouette coefficient was even higher (0.9).

To better capture inter-household wealth differences, per capita income was calculated based upon the OECD-modified equivalence scale (OECD 2013) and not on the basis of total household members. This equivalence-scale-based income was used only for the clustering exercise. The resulting clusters of different livelihood portfolios were subsequently analyzed via descriptive statistics.

Definition of constructed descriptive indicators

Sex ratio for total population: The sex ratio is the ratio of males to females in the population normalized to 100.

(No. of males/no. of females)*100.

Dependency ratio: The reference number is 100 and means that the number of independent household members (adults) is the same as the number of dependent household members (children and seniors). Below 100 the ratio indicates a stronger representation of independent members; above 100, the ratio indicates a stronger representation of dependent members.

100 x [Total no. of children (0-16) + Total no. of seniors (60+)]/[Total no. of active adults (17-59)].

Child-woman-ratio: The CWR is the ratio of children under age 5 per 1000 women of reproductive age (17-59).

(No. of children under age 6/no. of females age 17-59)*1000.

[Due to restricted access to data, we cannot separate women aged above and below 45 within the adult age class 17-59. As a result, the number of reproductive women in our survey is overestimated. Thus the child-woman ratio is underestimated.]

Education of adult household members: Highest education level attained among all adult (18 years and above) household members.

Total number of assets: Total no. of radio, television, phone, mobile phone, refrigerator, stove, donkey cart, bicycle, motorcycle, car, bakkie, truck, boat, satellite dish, hifi set, camera, western couch set, chairs.

Wild natural food resources: Total no. of fish, nuts, fruits, roots, worms/larvae/caterpillars, game, honey [the latter applies only for Cacuchi].

Wild natural building resources: Total no. of grass, reeds, timber, wood for construction (sticks and poles), stones/soil/clay.

Annual disposable cash income:
Earnings from private business, regular salary, pension/grant, remittances, governmental transfers, sales/exchanges/donations of agricultural

production, livestock and natural resources.

Regular access to cash: At least one household member receives cash income from private business, regular salary and/or government pension/grant.

Irregular access to cash: At least one household member receives cash from sales/exchanges/donations of agricultural production, livestock and natural resources, casual work/piece jobs, and/or household has received remittances in the last 6 months. No household member has regular access to cash.

[Due to the structure of the questionnaires, a clear separation of sold, exchanged and donated amounts cannot be made. Therefore, irregular access to cash might be overestimated.]

No access to cash: No household member receives cash from private business, regular salary and/or government pension/grant, selling/exchange/donation of agricultural production, livestock and natural resources, casual work/piece jobs, and household has not received remittances in the last 6 months.

Exchange rate for monetary conversions:

Seronga: Average exchange rate for 2011:

1 BWP = 0.144275 US\$

Cacuchi/Cusseque: Average exchange rate for 2012:

1 AOA = 0.010475 US\$

Mashare: Average exchange rate for 2011:

1 NAD = 0.1386 US\$

References

OECD (2013): http://www.oecd.org/eco/ growth/OECD-Note-Equivalence Scales.pdf (accessed on June 25th 2013)

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