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Impact of compliance with project requirements on projects value outcomes: Evaluation from TASAF-III beneficiaries' perspectives in Tanzania.

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Abstract

The study sought to evaluate the impact of compliance with projects requirements on projects value outcomes from Tanzania Social Action Fund (TASAF)-III beneficiaries' perspectives in Tanzania. Specifically, the study evaluated the impact of compliance with project requirements on households' relief from transitional income poverty (as a measure of projects value outcomes) in Tanzania. The study was a cross sectional design with multiple cases approach undertaken in twelve TASAF-III supported community economic development (CED) projects. Under multistage sampling procedure, the said CED projects, their six hosting districts and regions (Kilosa–Morogoro; Handeni–Tanga; Misungwi–Mwanza; Uyui–Tabora; Kibondo–Kigoma; and, Rungwe–Mbeya) were identified using stratified sampling. Simple random sampling enhanced to determine a sample of 480 households. Data were collected using research schedules and were descriptively and inferentially analyzed using STATA software. Propensity score matching (PSM), coupled with logistic model was considered the apt test statistic. The average treatment effect on the treated (ATT) observation results shown that, the mean differences in incomes [TZS. 7 794.30; t=0.61(t<2.00)] and spending [TZS 11 388.50; t=0.96 (t<2.00)] between the treated and control households' are non-significant at t<2.00. This implied that, compliance with TASAF-III project requirements has no significant impact on households' income poverty relief in Tanzania. Moreover, compliance with requirements does not necessarily lead to desired projects value outcomes—if requirements are not well defined. The study stresses on the selection of right projects' requirements with positive outcomes rather than having a set of requirements which are non-predictive to the desired targets' felt needs—when in compliance with.

Keywords: Income poverty > Project compliance >Compliance requirements> Project success >Project value outcomes.

1. Introduction

Attaining the desired values in the executed Community Economic Development (CED) projects, including those of Tanzania Social Action Fund (TASAF), has been a global tacit dare; the impact of which can be associated with endless income poverty among the project targets (NBS, 2020). On fighting against income poverty, which

refers to inability of an individual to attain a minimal standard of living measured in terms of consumption or income levels (Maliti, 2019); CED projects realizes less value outcomes for more of resources used (Matsuyama, 2019). With over 7.4 billion population now, two third of the global inhabitants living just above the poverty line ($1.90 per day) is at risk of falling below it again (Maliti, 2019; UN, 2020).

The situation is not different in Africa, where majority of the population faces the limited access to income resources and other public welfare bundles in the basket of needs (NBS, 2020). Tanzania is too a victim of global inequality, where about 85% of the total wealth is owned by only 10% of its rich dwellers (UN, 2020). Whilst recording an average growth of 7% in a decade (Germa, 2018), Tanzania had nearly 49% of its poor population living under $1.90 per day (NBS, 2020). For every four individuals moving out of income poverty, three of them fall into it again (Mahembe, 2017; NBS, 2020). This implies that, the success of CED executed project would be worth gauged on the levels it has relieved households from their renewed income poverty.

Most of the projects executed globally record less of their desired outcomes in transitional income poverty relief than expected in the light of beneficiaries' views (Kozhakhmetova, 2019). The project value outcomes referring to an intrinsic worthwhile delivered to project targets (Nalewaik, 2017) is inaptly attained than expected–despite countless initiatives undertaken by global development stakeholders, including those in Tanzania (Khan, 2020; Germa, 2018). Projects value for money and fitness for the purpose as the measures of project value outcomes are impaired (Simaya, 2018; Khan, 2019). Value for money refers to the utility derived from every sum of money spent in a project (Simaya, 2018). Fitness for the purpose meant functional specifications as defined by the project targets for their desired change (Khan, 2019). However, this study considers households' relief from transitional income poverty, under project fitness for the purpose, as the central variable in evaluating project value outcomes. The relief of households from transitional income poverty is tied to what Tanzania Social Action Fund (TASAF) was established to realize.

TASAF has been one of the instituted public poverty relief organ in Tanzania (Mtelevu, 2014). TASAF has evolved in three operative phases, namely TASAF-I (from 2000−2004), TASAF-II (from 2005−2009) and TASAF-III (from 2010−Todate). TASAFI had Community Development Initiatives (CDI) and Public Works Programme (PWP) in 42 districts; TASAF-II had CDI and PWP components country-wide, and TASAF-III has conditional cash transfer (CCT) and PWP components country-wide. While CCT projects meant to help poor households with no instant support and little-to-nonworking abilities (Sulemana, 2019); PWP components targeted to address instant households' income poverty for abled persons with structural unemployment country-wide (NBS, 2019). TASAF-III identified few districts (coined as impact wave) for which impact evaluation on the executed projects were to be done afterwards. Impact wave districts had both households involved in TASAF-III projects (treatment group) and those precluded from the same (control group). Despite all funding to TASAF, transitional income

poverty in Tanzania is still unquestionably high (Mtelevu, 2014; Germa, 2018). Non-compliance with project requirements has been named as the cause (Nanthagopan, 2019). However, full and substantially complied projects still give the similar results (Germa, 2018).

Despite a number of CED projects executed in varied communities in the world, including Tanzania, transitional in-and-out income poverty among the project targets has been unresolved challenge for decades–with high inequality rate tallying to 0.395 Gini Coefficient in 2018 (Maliti, 2019; NBS, 2020). Literatures (Parker, 2000; Fiene, 2016) indicate that, substantial compliance leads to predictive project success. However, the impact of compliance with project requirements on project value outcomes as defined by households' relief from transitional income poverty in Tanzania, has never been overtly ascertained–the clarity of which impelled the need for this study.

The overall objective of this study was "to evaluate the impact of compliance with projects requirements on projects value outcomes from TASAF-III beneficiaries' perspectives in Tanzania". The defined specific objective of the study was to evaluate the impact of compliance with TASAF-III projects requirements on project value outcomes as defined by households' relief from transitional income poverty in Tanzania.

The study is in line with section 5(ii) of Tanzania Development Vision (TDV) 2025, on monitoring, evaluation and review of vision implementation (URT, 2018), as a contributions to Sustainable Development Goals (SDGs) no.1 up to 17 defined by the United Nations.

The study was guided by the Theory of Regulatory Compliance (TRC) with the premise that, "being in full (100%) compliance with all rules is not necessarily a good policy; and that, all rules or regulations are not created equal" (Fiene, 2016). The theory proposes substantial compliance [TRC<100%] not full compliance [TRC<100%]–as when facilities become 100% compliant with all requirements, the overall positive outcomes and best practice scores drops off. TRC stresses on the selection of the right rules with predictive validity and less risk, rather than having more or less rules, which naturally are not significant enough to predict positive outcomes by being in compliance with. However, the theory is silent on the apt levels of substantial compliance for adherence to across diversified industries. Based on TRC premises, it was hypothesized that;-

"Compliance with projects requirements has significant impact on TASAF-III supported CED projects' value outcome in Tanzania".

Nevertheless, the basic project requirements across the industries have been classified as being regulatory framework such as: laws, rules, and policies (Fiene, 2016; Nanthagopan, 2019); contract's needs (Simaya, 2018); and, operational norms (Khan, 2019). Technical requirements are said to be project standards, principles, technicalities, skills and core competencies (Fiene, 2016; Nanthagopan, 2019). Moreover, project risk strategies, budgets, execution procedures, timing and scheduling as well as scoping and beneficiary targeting are considered as pertinent designing requirements that no project should overlook (Kozhakhmetova, 2019)..

Since realizing full compliance is not always likely, but the substantial one (Fiene, 2016; Khan, 2019), in average, only 6.7% of the global projects attain full compliance, 62.3% attain substantial.

Literatures and practices denote that project requirements so portrayed in section 5.2 are also relevant in TASAF supported projects, while delivery of households from transitional income poverty being the desired success outcomes in TASAF supported projects (World Bank, 2019; URT, 2019). The presented figure 1 for conceptual framework shows variables relationship that define the impact of compliance with TASAF project defined requirements on project success as defined by households delivery from transitional income poverty as a project fitness for the purpose variable.

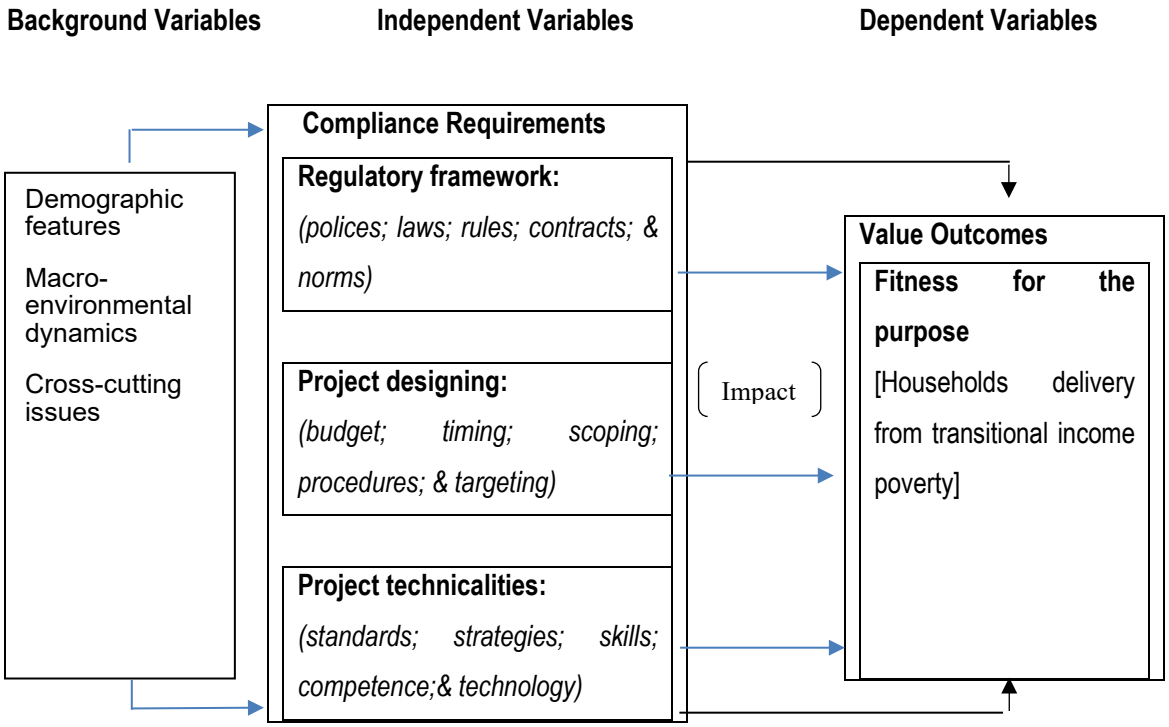

Figure 1: Conceptual Framework

Source: Modified from Maswe, G.M.M (2023: pp. 480)

2. Methodology

2.1 Design, Approach, Study Area and Target Population

The study was cross-sectional in design with multiple cases; conducted in 12 selected TASAF-III supported projects under impact wave. The 12 districts were equally identified from six districts (shown in brackets) in six administrative regions, namely Morogoro (Kilosa), Tanga (Handeni), Mwanza (Misungwi), Tabora (Uyui), Kigoma (Kibondo), and Mbeya (Rungwe); from coastal, north, lake, central, western and southern highland zones of Tanzania respectively. A cross-sectional design, is an observational study allowing data collection at a single point in time across a sample population (Kumar, 2011). The design was employed as it allows the examination of multiple factors and outcomes in one single study (Gakuu, 2018). The target population, which

is the population that a researcher is interested to study (Kumar, 2011) in this study was TASAF-III identified poor households. The said population was selected due to its transitional in-and-out income poverty challenge in Tanzania (Mtelevu, 2014) in the facet of executed CED projects.

2.2 Sampling Procedures, Sample Size, Units of Analysis, and Units of Observations.

The three levels multistage sampling method, for which the study population is divided into clusters, coupled with stratified and simple random sampling was used to obtain the appropriate sample (Gakuu, 2018)–as poor household's population in Tanzania is widely distributed. Firstly, the six impact wave districts equally distributed in six regions from six geographical zones, with differed culture–vowed to sway compliance, were identified using stratified sampling. The method involves the division of a population of interest into strata before selecting respondents with differed status (Kumar, 2011). Secondly, the twelve most representative TASAF-III projects were selected using the same stratified sampling method. Selection criteria were heterogeneity in terms of compliance levels (namely full, substantial and noncompliant); category (CCT and PWP components); and implementation status (treatment and control). Thirdly, 480 households under impact wave programme were chosen at 2:3 ratio for treatment (192) and control (288) subjects respectively, from the said impact wave districts using simple random sampling–for which each member of the subset had an equal probability of being chosen (Kumar, 2011).

Given the six impact wave districts with twelve selected TASAF-III supported projects had about 17 424 identified needy households' population (N) by June 2020 (NBS, 2020), and the error margin (e= 0.045); Yamane Taro model was used to decide the sample size (n) (Gakuu, 2018); as follows hereunder:

The sample size $(n) = \frac{N}{1+N(e)^2} = \frac{280{,}000}{1+280{,}000(0.5)^2} = 480.$

The 480 TASAF-III identified poor household were units of observation; whereas, the twelve identified TASAF-III supported projects were units of analysis. Whilst units of observation refers to entities for which the study information is sought, units of analysis means the entities for which the study generalization is made (Kumar, 2011).

2.3 Data collection, measurement, processing and analysis

The data gathered by the use of research schedules were descriptively and inferentially analyzed. While Descriptive statistics assessed the distribution of variables using central tendency and dispersion measures (Gakuu, 2018), inferential statistics tested the nature and magnitude of the link between dependent variable (value outcomes) and independent variables (project compliance with requirements) (Kumar, 2011). The study considered the following aspects to be the pertinent requirements for project compliance: regulatory framework (with project polices; laws; rules; contracts; and, norms); project designing (with project budget; timing; scoping; procedures; and, targeting); and, project technicalities (with project standards; strategies; skills; competence; and, technology). All variables defining project requirements were measured in nominal and

ordinal scale under varied inferential treatments. On the other hand, value outcomes, with fitness for the purpose, had households' incomes and spending—as its defining variables. All variables under value outcomes were measured in ratio scale. The data gathered were analyzed using STATA software. Percentages, frequencies and other parameters were tabulated and interpreted for conclusion drawing. The average score formula was used to determine the project compliance levels (PCL). The index involved summarising the scores for each assessed item and dividing by a total number of items.

$$\mathrm{PCL} = \frac{\sum_{i=1}^{k} Ii}{k} \quad \text{.......[1]}$$

Whereas: $\sum$ =summative sign; K =number of items in each factor; I =item of the i^{th} factor

The propensity score matching, coupled with logistic regression, was chosen as the test statistic. The model was opted for as it can measure the impact of the variable based on the matched sets of treated and untreated subjects who share a similar value of the propensity score of observation– estimated using the study data.

- ⇨ Dependent and independent variables were determined by letting;-

Y = Dependent variable = Project value outcomes

X = Dependent variable = Project compliance requirements

- ⇨ The treatment and control variables were determined and labelled thus;

D=1; treatment variable

D=0; control variables

In working out propensity score matching (PSM) model to evaluate the impact of compliance on value outcome, the mean sample average between two groups of samples (D=1 and D=0) were calculated to determine the difference of the groups' mean.

⇨ $\Delta\mu$ = ATT + "SB"..........................[2]

Whereas: ATT = Average treatment effect on the treated; and, SB = selection bias.

After this preliminary processes, the following steps were carried out;-

(i) Estimating the propensity score using appropriate model

Logit model was employed whereas;-

$$\ln \frac{e(X_i)}{1-e(X_i)} = \ln \frac{\Pr(Di=1|X_i)}{1-\Pr(Di=1|X_i)} = \acute{\alpha} + \beta^T x_i \quad \text{........ [3]}$$

Where:

$$e(Xi) = \acute{\alpha}_0 + \beta^T 1\,X\,1 + \beta^T 2\,X\,2 + \beta^T 3\,X\,3 + \ldots + \beta^T iXi \quad \text{.............. [4]}$$

And, $\acute{\alpha}$ = is the intercept

$\beta^T =$ regression coefficient of the treatment values

$Xi = X1 + X2 + X3$ = Observed values of the treated variables

(ii) Matching the propensity scores

The propensity score (PS) matching between the two groups D=1 and D=0 was done using Neighboring matching method. In defining the distance metric for the nearest match in the context of matching on propensity score, this metric could be used;-

$$d(\mathrm{I},\mathrm{J}) = |p(Xi) - \frac{1}{|J|}\sum_{i\epsilon J} p(Xj) \quad \text{...................... [5]}$$

Where ***i*** is typically a treated unit (D=1) and ***J*** is a set of control units (|*D=0*| denotes the cardinality of control units - *dJ*)

(iii) Evaluating the treatment effect

This involves the comparison of outcomes *y* between the treated and control observations, after matching

$$Y = \begin{cases} y_1 \ if \ D = 1 \\ y_0 \ if \ D = 0 \end{cases} \quad \text{..... [6]}$$

⇨ Since the study was an observational one, the average treatment effect on the treated (ATT), which is the difference between the outcomes of treated and control observations, was used as an evaluation tool. The equation for the model was:-

$$ATT = E(\Delta|D = 1) = E(y_1|x, D = 1) - E(y_0|x, D = 1) \text{..... [7]}$$

⇨ Equation [7] could be re-written as;

$$ATT = E(\Delta|p(x), D = 1) = E(y_1|p(x), D = 1) - E(y_0|p(x), D = 0) \text{... [8]}$$

⇨ Empirical estimation; each treated observation ***i*** was matched with control observations ***j***. The outcomes y_0 were weighed by ***w*** to give ATT as modelled below;-

$$ATT = \frac{1}{n_1} \sum_{i \in \{D=1\}} \left[y1, i - \sum_j w(i,j) y_0, j \right] \text{..... [9]}$$

Any significance in p-value (p ≥ 2.00) (O'Connor, 2012) would mean, compliance with project requirements have significant impact on project success in terms of transitional income poverty relief. Moreover, significant differences in incomes and spending between HHs in control and treatment groups would implied that compliance with TASAF-III project requirement has significant impact on HHs' relief from transitional income poverty.

(iv) Assumptions made for Propensity Score Matching test

⇨ Common support (overlap): Treatment does not indirectly affect the control observations. That, observable characteristics x do not exactly predict participation.

$$D0 < prob(D = 1|p(x) < 1 \text{..... [10]}$$

$$D0 < prob(D = 0|p(x) < 1 \text{..... [11]}$$

And, units with similar characteristics in the treatment and comparison group

$$D \perp x|p(x) \text{..... [12]}$$

⇨ Absence of selection bias

The outcomes are independent of treatment, conditional on x. hence, observable characteristics in x contain all relevant information about the potential outcomes

$$y_0, y_1 \perp D|x \text{..... [13]}$$

3. Findings and discusions

3.1 The Rated Statistics on CED projects Satisfaction Outcomes, Compliance with Project Requirements, and their Influencing Factors.

The subsection provides the brief statistics on the socio-demographic characteristics the surveyed households as described hereunder;-

3.1.1 Social-economic and Demographic Characteristics of Respondents

The descriptive statistics results indicate that, 81.1 percent of the surveyed households were aged between 41 and 80 years; 67.3 percent of whom were women. 96 percent of the said households had informal and primary education; with 91.5 percent of them being agrarians. However, 48 percent of the population was married,

having 4 – 6 family members, and, the proportion of widowers (33 percent) was moderately high (Table 1).

Table 1: Demographic characteristics for TASAF-III identified households

Parameters	Treatment Group		Control Group		Total	
	Frequency [F]	Percent [%]	Frequency [F]	Percent [%]	Frequency [F]	Percent [%]
Age Group						
01-20	05	03.0	01	00.4	06	1.2
21-40	23	12.0	17	06.0	40	8.3
41-60	83	43.0	70	24.3	153	31.9
61-80	71	37.0	165	57.3	236	49.2
80+	10	05.0	35	12.0	45	9.4
Total	**192**	**100.0**	**288**	**100.0**	**480**	**100.0**
Sex of respondents						
Male	24	12.5	133	46.2	157	**32.7**
Female	168	87.5	155	53.8	323	**67.3**
Total	**192**	**100.0**	**288**	**100.0**	**480**	**100.0**
Marital status						
Married	85	44.3	140	48.6	225	46.9
Single	14	07.3	28	09.7	42	8.8
Divorce	30	15.6	24	08.4	54	11.2
Widower	63	32.8	96	33.3	159	33.1
Total	**192**	**100.0**	**288**	**100.0**	**480**	**100.0**
Household size						
1-3	35	18.3	88	30.6	123	25.6
4-6	122	63.5	169	58.7	291	60.6
7-9	30	15.6	24	08.3	54	11.3
10+	05	02.6	07	02.4	12	02.5
Total	**192**	**100.0**	**288**	**100.0**	**480**	**100.0**
Educational Level						
Non- formal educated	82	42.7	149	51.7	231	48.1
Primary Education	100	52.1	130	45.2	230	48.0
Secondary Education	09	4.7	08	02.7	17	3.5
Post-secondary edc	01	0.5	01	00.4	02	0.4

Total	**192**	**100.0**	**288**	**100.0**	**288**	**100.0**
Persons' occupations						
Farmer	166	86.5	273	94.8	439	91.5
Others	26	13.5	15	05.2	41	08.5
Total	**192**	**100.0**	**288**	**100.0**	**480**	**100.0**

Source: Survey data (2022)

Table 1 shows that the majority (81.1 percent) of respondents were within 41 – 80 years age class, which marks the population with limited mobility and opportunity seeking motivation potentials as Bellu (2006) and URT (2021) also assert. About 99.6 percent of the respondents did not have post-secondary training (education) and hence were liable to exclusion from formal employments, as also revealed by Peacock (1954). The only livelihood option remained was agriculture; absorbing 91.5 percent of the said population. However, agricultural sector has never realized the expected economic gains especially in most of the less developed counties (Jayne, 2018); and hence, propelling households income poverty in their renewed cycles of lives (URT, 2021).

Most of TASAF-III projects participants are women (67.3 percent), with about 46.9 percent being married. Based on the findings, there is a likelihood that, married women in TASAF-III projects represent the more poverty inclined sex in Tanzania's population that see TASAF-III as the sole option for its survival. The finding agrees with those of Khan (2020) which extol women as household responsibility bearers who need to be involved in economic generating gender roles than in the habitual community generating roles. Moreover, the study revealed high fertility rates (4–6 children) among TASAF supported households. Even if Engel's Law (Peacock, 1954) commends high population for growth; greater population command higher resources needs that poor households never manage to provide in the developing states (Matsuyama, 2019). However UN (2020) commends the states with implicit fertility control policies to adopt the explicit ones for better balance of the growths and human population dynamics.

3.1.2 Generalized households' income, spending, saving and life style patterns

The results indicated the overall average regional earnings, spending, and savings for treatment and control groups before TASAF-III intervention to be TZS 175 665.37; 174 887.16; and 620.66 respectively. Moreover, the overall averages for the current monthly regional income, spending, and savings were TZS 292 186.77; 273 342.67; and, 18 844.1 respectively (Table 2).

Table 2: Households' incomes, spending, and saving patterns

Regional Intervention Period	Treatment Group			Control Group		
	Average Income	Average Spending	Average Saving	Average Income	Average Spending	Average Saving
Handeni [Tanga]						
Before TASAF-III	266875.00	266828.13	62.50	196331.25	196310.42	20.83
Current	333728.13	323403.13	8743.75	271729.17	264741.67	6270.83
Kibondo [Kigoma]						
Before TASAF-III	132528.13	132528.13	500.00	147295.83	145806.25	1489.58
Current	287760.94	279026.56	4406.25	285686.46	267344.79	15583.33
Kilosa [Morogoro]						
Before TASAF-III	144843.75	144843.75	0.00	145572.92	142531.25	1625.00
Current	266906.25	256375.00	8531.25	275828.13	259942.71	16218.75
Misungwi [Mwanza]						
Before TASAF-III	137187.50	136000.00	1125.00	122312.50	120375.00	2041.67
Current	321896.88	301537.50	18656.25	265583.33	255750.00	9479.17
Rungwe [Mbeya]						
Before TASAF-III	256650.00	256462.50	187.50	139864.58	141468.75	333.33
Current	319037.50	314162.50	4843.75	232604.17	217895.83	21922.58
Uyui [Tabora]						
Before TASAF-III	244356.25	241387.50	0.00	174166.67	174104.17	62.50
Current	314634.38	304228.13	10516.13	330845.83	235704.17	17329.17
Regional Avg (before Tasaf)	**197073.44**	**196341.67**	**312.50**	**154257.29**	**153432.64**	**928.82**
Regional current averages	**307327.35**	**296455.47**	**9282.90**	**277046.18**	**250229.87**	**14,467.31**
Mean Household Size: Control Group = 4.5; Treatment Group = 5.1; Overall mean = 4.8						

Source: Survey data (2022)

3.1.3 Income patterns in TASAF-III identified poor households

As Handeni recorded the highest household incomes of TZS 333 728.13 in the current evaluation period; Kilosa was ranked the last in earnings with TZS 266 906.25. However, before TASAF-III interventions, Kibondo, Kilosa and Misungwi had lower incomes compared to the mean regional incomes of TZS 197 073.44. The two regions recorded higher earnings above the mean regional threshold (TZS 154 257.29) were Uyui, with TZS

174 166.67, and Handeni, with TZS 196 331.25. Besides the multidimensional facets of poverty as asserted by Singh (2015) and Mahembe (2017), regions differ in incomes due to their varied production resource endowments (Jayne, 2018).

Taking into consideration the income poverty measures as per head count metrics, records avail that income inequality is high among households in the surveyed regions (Khan, 2020). Based on Atkinson (1983), Social Welfare (SWF) is denoted by average utility as:

$SWF = \frac{1}{N}\sum_{i=I}^{n} \cup (y_i)$. Whereas: SWF= Social welfare, $\sum$ =Summation symbol;

U= Utility; Y= Income; I=Income; n & i = number of observations.

This implies, as household's income increases, their welfare increases as well. Since utility is the function of income; the equation for their relationship could be rewritten as;-

$\cup (y_i) = \frac{1}{1-\varepsilon} y_i^{1-\varepsilon}$ if $\varepsilon \neq 1$; and, $\cup (y_i)$ = log y_i if ε=1

As the parameter of inequality eversion (ε) increases; surges in lower earnings are given relatively more weight in producing social welfare. As with Atkinson, there is a level of Equality Distribution Equivalent (EDE), termed an Atkinson index (A ε); that if obtained by every individual household, the society would be enabled to experience the same level of welfare as actual incomes (Atkinson, 1983; Bellu, 2006). This level is expressed as:

$$(\varepsilon) = 1 - \frac{y_{EDE}\sqrt[\circ]{n}}{\hat{y}\sqrt[\circ]{n}} = 1 - \frac{y_{EDE}}{\hat{y}} \quad ;$$

And, therefore,

$$y_{EDE} = \hat{y}(1 - A(\varepsilon)) = W \quad .$$

Where; $\hat{y}$ = the mean individual income.

But individual income in a household could be given by:

Mean monthly income (M$\hat{y}$) in TZS = $\frac{MhhMI}{MhhS} = \frac{292\ 195.77}{4.8} = 60\ 874.12.$

Mean daily income ($\hat{y}$) in TZS = $\frac{MhhDI}{\mathrm{DiM}} = \frac{292\ 195.77}{30}$= TZS.2029.14

Whereas; MhhDI = mean daily household income: MhhMI = mean household monthly income; MhhS = mean household size; and, DiM = Days in a month (30). With yet undecided Atkinson value A(ε), the projected individuals TASAF-III's regional welfare inequality level could be; $y_{EDE} = 2\ 029.14\ (1 - A(\varepsilon))$. Therefore, $2\ 029.14\ (1 - A(\varepsilon))100$ is the proportion of total income that a privileged individual household must be ready to give in order to have equally distributed income. Since the current estimated per capita income ($\hat{y} = \mathrm{Tzs}\ 2\ 029.14$) among TASAF surveyed regions is less than the poverty line index (1.99$=TZS 4 577) a day [$i.e.\ \hat{y}$ < TZS 4 577]; it could be taken that, the social welfare of TASAF-III supported households is practically poor compared to overall community welfares in the surveyed area.

3.1.4 Spending patterns in TASAF-III identified poor households

Based on overall spending (Table 2), Handeni recorded the highest households average spending in the current evaluation period (TZS 294 072.40). Kilosa was the last in the list with TZS 258 158.60 spent in the current evaluation period. Besides having low incomes, Kibondo, Kilosa and Misungwi also shown relatively smaller spending compared to overall mean regional

household spending (TZS 196 341.67). Uyui with TZS 174 104.17 outlay and Handeni with Tzs 196 310.42 outlay recorded high spending above the mean regional threshold (TZS 153 432.64) before TASAF intervention. However, in Keynes' simple 2-sector demand model, an individual can either consume their income today or save it for later investments (Atkinson, 1983) as given hereunder:

Option one: Income (*Y*) = consumption (C) + saving (*S*)

Option two: Income (*Y*) = consumption (*C*) + investment (I)

Form the above relationship, it can also be seen that: $S = Y - C$, and; $I = Y - C$.

Computations of data in Table 2 avails the current household monthly income for control and treatment groups in the surveyed regions to be TZS 277 046.18 and TZS 307 327.35 respectively; while their respective consumption being TZS 250 229.87 and TZS 296 455.47. It is too noted that, the current average monthly saving capacity for control (TZS 14 467.31) and treatment (TZS 9 282.90) groups are too small for households' desired investments to rivalry operate in the current capital intensive global business (UN, 2020). When a poor household uses up to 100 percent of income in the basket of necessities, then; "a household spending equals consumption". According to Keynes' model, exceeded consumption does not only impair individuals' savings, but also their future investment capacity (Matsuyama, 2019)– as little of the total household income is recycled in the economy when considering consumption multiplier (Atkinson, 1983) given by:

Consumption multiplier (M) = $[1 - \text{Marginal propensity to consume } (MPC)]^{-1}$

3.1.5 Saving patterns in TASAF-III identified poor households

Results Table 2 reveal that the districts which appeared to have higher savings than the regional average (TZS 312.50) before TASAF-III were Kibondo (TZS 500.00) and Misungwi (TZS 1125.00). These districts seem to be inferior in terms of incomes and spending patterns. With control group, Uyui and Handeni districts which seem to have high records of income and spending, displayed the lowest rates of savings in the list with TZS 62.50 and TZS 20.83 respectively. However, the average households monthly saving (TZS 11 875.02) seem to be sizably small to allow competitive households investment for their promising future. The portrayed saving trend practically validates the axiom that, saving is a culture, which is not much influenced by what you earn; rather, the level at which you would wish to discount the present for the future gain (Guin, 2017). That, individuals with little earning expectation have greater potential of saving as they are uncertain of what their incomes will be in future; whilst those with defined income spend more as they are certain of their future cash inflows. Based on Guin's claim, households in treatment group might be saving less (TZS 9282.90) than the saved average (TZS 118 75.02) compared to control group with TZS 14 467.31 saving as they are optimist to bridge their future financial needs from TASAF-III–contrary to control group members considering more of current saving as their future reinvestment option. In linking option one and option two equations above, it can be noted that;

Consumption (*C*) + Saving (*S*) = Consumption (*C*) + Investment (*I*).

On subtracting Consumption in both sides, we have;

Saving (*S*) = Investment (*I*). .

Therefore, the more a household saves, the more it is likely to invest–and it's vice versa.

3.1.6 Life style patterns in TASAF-III identified poor households

Findings (Table 3) show that, majority of households (99.5 percent) lived in grass thatched houses before TASAF-III; the rate of which was reduced to be 62.15 percent after TASAF-III intervention. Sole ownership of houses was minimal at 57.5 percent before TASAF-III; compared to those of control (63 percent) and treatment (75 percent) after TASAF-III intervention. Before TASAF-III, 97.7 percent of all poor households fared one meal a day; and, 97.8 percent of the said population had no stable income before TASAF-III; unlike, 43.3 percent who afforded at most one meal and 70.6 percent with no stable incomes after TASAF-III. However, over 70.8 percent of both treatment and control households was not linked to health insurance before and after TASAF-III intervention.

Table 3: Life style patterns in TASAF-III Identified poor households

Household Attribute		Before TASAF Intervention		After TASAF Intervention	
		Treatment Group	Control Group	Treatment Group	Control Group
Households housing Status	Grass thatched	191(99.5)	287(99.7)	114(59.4)	187(64.9)
	Iron roofed	01(0.5)	01(0.3)	78(40.6)	101(35.1)
	Others	0(0.00)	0(00)	0(0.00)	0(00)
	Total	**192(100%)**	**288(100%)**	**192(100%)**	**288(100%)**
Households' Housing Ownership	Sole owned	90(46.9)	196(68.1)	121(63)	216(75)
	Ranted house	33(17.2)	25 (8.7)	46(24)	38(13.2)
	Relative hosted	69(35.9)	67(22.9)	25(13)	34(11.8)
	Total	**192(100%)**	**288(100%)**	**192(100%)**	**288(100%)**
Households' number of meals per day	One meal	185(96.4)	285(99)	84(43.8)	123(42.7)
	Two Meals	07(3.6)	01(0.3)	103(53.6)	147(51)
	Three or more	0(00)	2(0.7)	05(2.6)	18(6.3)
	Total	**192(100%)**	**288(100%)**	**192(100%)**	**288(100%)**
Household's ownership of stable income	Owns one	03(1.6)	7(2.4)	54(28.1)	87(30.2)
	Do not own	188(97.9)	281(97.6)	137(71.4)	201(69.8)
	Total	**192(100%)**	**288(100%)**	**192(100%)**	**288(100%)**
	Linked	25(13)	44(15.3)	56(29.2)	64(22.2)
	Not linked	167(87)	244(84.7)	136(70.8)	224(77.8)

Accessibility to Health Insurance	**Total**	**192(100%)**	**288(100%)**	**192(100%)**	**288(100%)**

Source: Survey data (2022)

The findings in (Table 3) reveal a slight change in ownership of grass thatched households' shelters status from 99.5 to 59.4 percent for treatment households and from 99.7 to 64.9 percent for control households before and after TASAF interventions respectively. The said shift went in hand with an increase in iron roofed houses from 0.5 to 40.6 percent for treatment and from 0.3 to 35.1 percent for control households before and after TASAF-III respectively. Household's sole tenure of shelters too increased by 11.5 percent in the said periods for both treatment and control households. The said changes in housing status were slightly lower than those recorded by NBS (2020) as being 79 percent based on 2017/2019 Tanzania mainland household survey.

Whilst the number of households affording only one meal per day in the treatment group decreased from 96.4 to 43.8 percent, that of control group decreased from 99 to 42.7 percent. As also once revealed by Singh (2015), the quality of meal could be a problem–despite this decrease. The estimated pa capita income [$\hat{y}$ =TZS 2029.4; $\hat{y}$<TZS 4577(1.99$)] in the surveyed regions gives no purchasing-power advantage for households ability to procure the balanced meal from the basket of food staff–given the escalating market prices.

Besides, the study reveals that, about 71.4 percent of households in treatment group and 69.8 percent in control group do not have stable income sources after TASAF intervention. Based on sustainable livelihood framework (Bellu, 2006); the incidence propels households vulnerability to transitional income poverty dares. However, linkage to health insurances portrays minor changes for treatment (from 13 to 29.2 percent) and control group (from 15.3 to 22.2 percent). This could reflect to households' wellbeing uncertainty; as households' production capacities are vested on their health (Singh, 2015). However, it is not clear whether the recorded changes relate to TASAF-III lead projects or from the spill-over of other undertaken growth programmes.

3.1.7 TASAF-III compliance levels with its defined projects requirements and beneficiaries perceived value outcomes from the complied projects

The mean compliances with regulatory (3.484±.099), technical (3.089±.086), and designing (2.943±.094) requirements denoted the differentiated levels at which the said requirements influence project value outcomes. The similar trend could also be read from their linked standard deviations. The higher the value of the same, the higher the level of predictive validity of the requirement and it's vice versa. Based on average score method (Kumar, 2011), overall compliance level with TASAF-III project requirements was substantial. About 26(13.5 percent) of project requirements were non-complied (<2 scoring level); 129(67.2 percent) substantially complied (2−4 scoring levels), while

37(19.3 percent) of the same being fully complied (>4 scoring level) (Table 4).

Table 4: Rated TASAF-III projects compliance levels and its relationship with project requirements

	Project Compliance Levels							
None [N or 0%]; Low [L]; Average [Avg]; High [H]; Full [F or 100%]; Substantial [S =L-H] success in frequency; Total [T]; Mean [M]; Standard deviations [SD].								
Complied Project Attributes	[N]	[L]	[Avg]	[H]	[F]	[T]	[M]	[SD]
		[S =L-H]						
Regulatory Requirements								
TASAF governing policies	27	29	33	44	59	192		
TASAF governing laws	28	31	34	51	48	192		
TASAF binding contracts	25	25	44	49	49	192	3.484±.099	1.384
TASAF governing norms	16	18	34	37	87	192		
TASAF governing regulations	24	27	35	44	62	192		
Average score	**24**	**26**	**36**	**45**	**61**	**192**		
Technical Requirements								
TASAF defined standards	23	41	66	35	27	192		
TASAF defined strategies	19	50	48	49	26	192		
TASAF project skills	25	27	53	62	25	192	3.089±.086	1.188
TASAF Technology Transfer	14	32	63	60	23	192		
TASAF Core Competence	17	61	51	40	23	192		
Average score	**20**	**42**	**56**	**49**	**25**	**192**		
Designing Requirements								
TASAF Budget	23	33	49	50	37	192		
TASAF Procedures	12	27	51	76	26	192	2.943±.094	1.299
TASAF Project Timing	9	24	66	69	24	192		
TASAF Project Scoping	45	66	36	24	21	192		
TASAF Beneficiaries Targeting	81	50	28	15	18	192		
Average score	**34**	**40**	**46**	**47**	**25**	**192**		

Overall average score	**26**	**36**	**46**	**47**	**37**	**192**		
Overall Compliance Level [Scores Range]	**[N]**	**[S =L-H]**			**[F]**	**[T]**	**[M]**	**[SD]**
< **2**	26	00			00	192	3.172±.095	1.313
2−4	00	129			00			
> 4	00	00			37			

Source: Survey data, 2022

Respondents perceive the overall compliance with project requirements (regulatory, technical and designing) to be of substantial level (74.5 percent). While fitness for the purpose related values scoring higher priorities from TASAF-III beneficiaries' views, those related to value for money were lower prioritized in the list. This implies that, any failure of TASAF-III may be result of other factors beyond compliance perils.

Moreover, the crosstab results (Table.5) shown that, the overall relationship between Households perceived TASAF-III projects values and compliance with TASAF-III project requirements ranged from non-success to low levels. The link between compliance with project requirements and project value for money was low in temperament, as the relationship between compliance with TASAF-III project requirement and project fitness for the purpose seem to be of non-success rated. With households income poverty freedom 40(20.8 percent) being valued the most, respondents consider ensured medical facilities 11(5.7 percent); cost-free education 13(6.8 percent) and descent houses 24(12.5 percent) as the valued necessities which when adequately realized constitutes to project fitness for the purpose. The said value outcomes are synonymous to those defined by Nalewaik (2017), Nanthagopan (2019) and Khan (2020) in their studies.

Table 5: Rated relationship between compliance levels with TASAF-III project requirements and HHs prioritized value outcomes

				Rated Compliance with Project Requirements										
Household [HH]; Households priority need [HP]; Attainment status [ST]; Attained need [A]; Unattained need [U]; None [N or 0%]; Low [L]; Average [Avg]; High [H]; Full [F or 100%]; Substantial [S =L-H] success in frequency; Total [T]; Mean [M]; Standard deviation [SD]; Pearson Chi-Sq. [X^2]; Degree of freedom [DF]; Asymp. Sig. (2-side) [*P*]														
	Project value	**[HP]**	**[ST]**	[N]	[L] [S =L-H]	[Avg]	[H]	[F]	[T]	[M]	[SD]	[X^2]	[DF]	[*P*]
	Fit for the purpose													
Households	HH income poverty	48[25]$_1$	U	00	35	46	34	37	152	.208±.029	.407	129.086	4	.000
			A	26	01	00	13	00	40					
	HH descent houses	33[17]$_2$	U	02	36	46	47	37	168	.125±.024	.331	175.121	4	.000

		A	24	00	00	0	00	24					
HH cost free education	29[15]$_3$	U	13	36	46	47	37	179	.068±.018	.252	89.028	4	.000
		A	13	00	00	00	00	13					
HH ensured medical care	25[13]$_4$	U	15	36	46	47	37	181	.057±.017	.233	74.499	4	.000
		A	11	00	00	00	00	11					
Value for money													
Project sustainability	23[12]$_5$	U	00	00	34	32	37	103	.464±.036	.500	115.263	4	.000
		A	26	36	12	15	00	89					
Project quality	19[10]$_6$	U	00	00	45	32	37	114	.406±.406	.492	145.605	4	.000
		A	26	36	01	15	00	78					
Project cost relevance	15[08]$_7$	U	00	17	46	34	37	134	.464±.036	.460	104.837	4	.000
		A	26	19	00	13	00	58					
From CCT projects													
Aiding school pupils	–	U	00	36	46	35	37	154	.198±.029	.399	135.708	4	.000
	–	A	26	00	00	12	00	38					
Enabling food access	–	U	00	22	46	34	37	139	.276±.032	.448	102.130	4	.000
	–	A	26	14	00	13	00	53					
From PWP projects	–												
Job creation	–	U	00	13	46	34	37	130	.323±.034	.469	111.001	4	.000
	–	A	26	23	00	13	00	62					
Enabling food access	–	U	00	27	46	34	37	144	.250±.031	.434	105.844	4	.000
	–	A	26	09	00	13	00	48					
			26	**36**	**46**	**47**	**37**	**192**					

TASAF Intervention

Source: Survey data, 2022

On the other hands, the same households consider project sustainability 89(46.4 percent), project quality 78(40.6 percent), and project cost relevance 58(30.2 percent) as the pertinent households valued project outcomes that defines project value for money; as also portrayed by Simaya (2018) and Khan (2019). From the results, it could be said that, TASAF-III CED projects have attained relatively higher success on quantitative project aspects (project cost relevance) than on other remaining qualitative domains of households perceived value outcomes. Eja (2020) associate the revealed performance trend with projects failure in developing countries.

The CCTs with projects related to pupils sponsorship 38(19.8 percent) and enabling access to food 53(27.6 percent); as well as PWPs with unemployment relief 62(32.3 percent) and access to food 48(25 percent)

projects have been the top priorities for many CED executed projects across the globe. However, success results of the said projects are uneven, with mixed outcomes for post programme impacts fuelled by inapt project designs and executions (Subbarrao, 2013; Reese, 2014). The defined TASAF-III project components, namely CCT and PWP for overall project purpose are not well integrated with households' lifelong priorities—as they are temporally measures to households' priorities compelling long term solutions. Oino (2015) and Khan (2020) stress on supporting family income generating activities in fighting against households income poverty. However, with the observed trivial progress made in attaining some of prioritized households' project value outcomes, impact assessment was inevitable to ascertain whether the success is TASAF-III intervention driven or not–as spill overs from other programmes might have the stake for the same (Simaya, 2018).

3.2 Impact of compliance with project requirements on projects value outcomes

3.2.1 Model classification

Table 6: Model classification table

	-------- True --------		
Classified	**D**	**~D**	**Total**
+	77	47	124
-	115	241	356
Total	**192**	**288**	**480**

Classified + if predicted Pr(D) >= .5 True D defined as Tasaf!= 0

Source: Survey data, 2022

The PSM model, using neighbour (10) matching algorithm, was used to evaluate the impact of compliance on project value outcomes defined by households' relief from transitional income poverty in Tanzania. The key rule was met; as both of control and treatment observations were drawn from the same population of poor HHs in Tanzania.

- ⇨ Dependent and independent variables were determined by letting;-

Y = Dependent variable = Project value outcomes

X = Dependent variable = Project compliance requirements

- ⇨ The treatment and control variables were determined and labelled thus;

D=1; treatment variable

D=0; control variables

The average between the two samples groups (D=1 and D=0) were calculated to determine the differences of the groups' means. The following model outputs were given:-

Table 6 shows that 77 cases in treatment group are correctly placed, while 47 cases in the group are incorrectly placed in the model. While 241 cases in control group are correctly placed, 115 cases of the same group are incorrectly placed in the model (O'Connor, 2012).

The goodness of fit model with deviance and Pearson chi squire test was meant to determine whether a model exhibits good fit to the data, if non-significant at p>0.05 (Kumar, 2011). With 480 total number of observations, and 430 number of covariate patterns; the Pearson chi squire test result (x^2 =432.86; df=422) shown p=0.035 (Table 7).

3.2.2 Goodness-of-fit

Table 7: Logistic model for TASAF-III goodness-of-fit test

number of observations	=	480
number of covariate patterns	=	430
Pearson chi2(df=422)	=	432.86
Prob > chi2	=	0.3470

Source: Survey data (2022)

Based on null hypothesis (*Ho*) that, the observed data is having goodness of fit with the fitted model, Pearson chi squire test [x^2 (63) =432.86, *p*=0.3470], being non-significant (*p>.05*), the result suggested the acceptance of the null hypothesis that "the observed data was having the goodness of fit with the fitted model". Hence, it is the good model fit.

3.2.3 Model significance

a) Estimating probability of participation

A number of attributes were said to influence individuals' participation to the programme. However, a few of the selected ones included: age, household size, marital status, years of school, occupation, ownership of houses, and health insurance possession. Table 8 indicates the number of observations to be 480; Chi squire likelihood ratio (X^2)=67.19 at df=7; while the probability Chi squire (X^2)=0.00 and pseudo R squire (R^2)=0.104. Based on Chi squire (X^2) likelihood ratio; it was concluded that, the strength of association between the treated and control variables was great of about 67.19 percent. With *p*-values, individuals' likelihood to participate in TASAF-III project was estimated as indicated in the same Table 8 (O'Connor, 2012).

Table 8: Estimated probability of households participation in TASAF-III projects

TASAF	Coef.	St.Err.	Z	P>|z|	[95% Conf	Interval]	Sig
Age	-0.042	0.007	-5.570	0.000	-0.056	-0.027	***
Household size	0.112	0.053	2.100	0.036	0.007	0.216	**
Marital status	0.434	0.208	2.080	0.037	0.025	0.842	**

Occupations	1.143	0.377	3.030	0.002	0.405	1.882	***
Years of school	0.010	0.029	0.360	0.718	-0.046	0.067	
House ownership	0.553	0.305	1.810	0.070	-0.044	1.151	*
Health insurance	0.317	0.294	1.080	0.282	-0.260	0.893	
Constant	-1.529	1.003	-1.520	0.127	-3.494	0.437	

Mean dependent var	0.400	SD dependent var	0.490
Pseudo R2	0.104	Number of obs	480
LR chi2(7)	67.190	Prob > chi2	0.000
Akaike crit. (AIC)	594.901	Bayesian crit. (BIC)	628.292
		Log likelihood	-289.45063

*** p<.01, ** p<.05, * p<.1

Source: Survey data (2022)

Note: the common support option has been selected to be [0.09614451, 0.94506362]. The pseudo-R^2 show how well the regression of X explains the participation probability.

Based on significant *p*−values and their coefficients, the results revealed that: individual's age was significant at p=0.000(*p<0.01*) with -1.529 coefficient of participation. This implies that, as ones' age increases, the probability of their participation to TASAF-III supported project decreases. Household size was significant at p=0.036(*p<0.05*) with 0.112 coefficient of participation, which means that as household size increases, the probability of participation to TASAF-III supported project increases. The marital status was significant at p=0.037(*p<0.05*) with 0.434 coefficient of participation. Married individuals are more likely to participate in TASAF-III supported project than single individuals. Occupations were significant at p=0.002(*p<0.05*) with 1.143 coefficient of participation. Farmers (main occupants) are more likely to participate in TASAF-III supported project than non-farming persons. House ownerships was slightly significant at p=0.070(*p<0.1*) with 0.553(*p<0.1)* coefficient of participation. Non-owners of houses were more likely to participate in TASAF-III supported projects than house proprietors. Life hardship coupled with households' burden are considered the drivers behind the observed participation likelihoods (Subbarao, 2013).

The results are slightly different from those of Singh (2015) which revealed age and house ownership to be negative significant; as well as those by O'Connor (2012) which revealed age and family cohort as non-significant predictors to project participation. The differences may be linked with cultural variations that define social distribution of labour (Kozhakhmetova, 2019).

b) Determining area of common support

Given the data used, the area of common support is determined in Table 9.

Table 9: Area of common support

Variable	Obs	Mean	Std. Dev	Min	Max
Propensity scores for non TASAF participants	288	0.345714	0.147533	0.066369	0.8423455
Propensity scores for TASAF participants	192	0.481430	0.192292	0.096145	0.9450636

Source: Survey data (2022)

The common support area selected was [0.0961445, 0.8423455]; implying that, densities of the estimated propensity scores for TASAF-III participants and non-participants overlapped in between 0.0961445 (minimum limit) to 0.8423455 (maximum limit).

c) Test for mean differences of propensity scores for treated and controls in blocks

A test was done to check the mean difference of propensity scores for treated and control variables across the blocks; the results of which are presented in Table10.

Table 10: Two-sample t test for checking propensity scores in blocks

	obs1	obs2	Mean1	Mean2	dif	St Err	df	t value	p value	[95% Conf. Interval]	
Block 1	38	12	.159	.147	.012	.010	48	1.268	0.211	-.007	.031
Block 2	164	57	.299	.315	-.016	.008	219	-1.940	0.054	-.033	.000
Block 3	66	69	.492	.483	.009	.010	133	0.835	0.406	-.012	.029
Block 4	15	40	.678	.686	-.008	.018	53	-0.425	0.673	-.044	.028
Block 5	02	14	.827	.853	-.026	.029	14	-0.894	0.387	-.087	.036
At 95% Confidence Interval				**1= control**				**2= treatment**			

Source: Survey data (2022)

With respect to *p*-values ($p>0.05$) and *t*-values ($t<2.000$) (O'Connor, 2012), Table 10 results show that; the mean propensity score in each block is not different for treated and control. Hence, the model is adequate as the propensity scores are evenly distributed.

d) Test status of the balancing property of the propensity score

The balancing properties of the number of control and treated cases could be determined within the inferior bound; and the summary of which be given in Table 11.

Table 11: Test of the balancing property of the propensity score

Inferior of block of p score	TASAF		
	TASAF Control households	TASAF treatment households	Total
0.0961445	38	12	50

0.2	164	57	221
0.4	66	69	135
0.6	15	40	55
0.8	2	14	16
Total	**285**	**192**	**477**

Note: the common support option has been selected

Source: Survey data (2022)

The balancing property is satisfied. Table 11 shows the inferior bound, the number of treated and the number of controls for each block

e) Balancing property of propensity score with option detail for detailed outputs

A two-sample t-test with equal variances was done to check the characteristics balance of variables in blocks. Five blocks for balanced characteristics of variables with equal variances were determined; and, the results are summarized in table 12 as follows:

Table 12: Two-sample t-test for checking characteristics balance of variables in blocks (1 control; 2 treatment observations)

Block 1	**obs1**	**obs2**	**Mean1**	**Mean2**	**dif**	**St Err**	**df**	**t value**	**p value**
Age	38	12	81.026	84.833	-3.807	2.615	48	-1.456	0.152
Household size	38	12	2.526	2.667	-.140	.478	48	-0.293	0.770
Marital status	38	12	1.474	1.500	-.026	.169	48	-0.156	0.877
Occupations	38	12	1	1	0	0	48	0.800	0.428
Years of school	38	12	3.079	1.167	1.912	1.239	48	1.543	0.129
House ownership	38	12	1.053	1	.053	.066	48	0.800	0.428
Health insurance	38	12	1.737	2	-.263	.130	48	-2.028	0.048
Block 2	**obs1**	**obs2**	**Mean1**	**Mean2**	**dif**	**St Err**	**df**	**t value**	**p value**
Age	164	57	68.945	66.702	2.243	1.219	219	1.840	0.067
Household size	164	57	4.463	4.474	-.010	.266	219	-0.037	-0.039
Marital status	164	57	1.476	1.544	-.068	.077	219	-0.885	0.377
Occupations	164	57	1.043	1.018	.025	.029	219	0.873	0.384
Years of school	164	57	3.146	3.702	-.555	.560	219	-0.992	0.322
House ownership	164	57	1.055	1.053	.002	.035	219	0.064	0.949
Health insurance	164	57	1.872	1.807	.065	.054	219	1.199	0.232
Block 3	**obs1**	**obs2**	**Mean1**	**Mean2**	**dif**	**St Err**	**df**	**t value**	**p value**
Age	66	69	54.742	54.377	.366	1.826	133	0.200	0.842

Household size	66	69	5.288	5.493	-.205	.316	133	-0.649	0.517
Marital status	66	69	1.621	1.507	.114	.086	133	1.333	0.185
Occupations	66	69	1.061	1.058	.003	.041	133	0.064	0.949
Years of school	66	69	4.470	3.957	.513	.609	133	0.842	0.401
House ownership	66	69	1.152	1.130	.021	.060	133	0.350	0.727
Health insurance	66	69	1.864	1.855	.009	.060	133	0.142	0.887
Block 4	**obs1**	**obs2**	**Mean1**	**Mean2**	**dif**	**St Err**	**df**	**t value**	**P value**
Age	15	40	42.067	45.9	-3.833	4.197	53	-0.913	0.365
Household size	15	40	6.133	5.65	.483	.531	53	0.911	0.367
Marital status	15	40	1.533	1.675	-.142	.147	53	-0.963	0.340
Occupations	15	40	1.200	1.25	-.050	.131	53	-0.382	0.704
Years of school	15	40	4.000	5.375	-1.375	1.105	53	-1.245	0.219
House ownership	15	40	1.200	1.4	-.200	.144	53	-1.388	0.171
Health insurance	15	40	1.933	1.975	-.042	.058	53	-0.725	0.472
Block 5	**obs1**	**obs2**	**Mean1**	**Mean2**	**dif**	**St Err**	**df**	**t value**	**p value**
Age	2	14	42	34.214	7.786	12.572	14	0.619	0.546
Household size	2	14	5.5	5.786	-.286	1.550	14	-0.184	0.856
Marital status	2	14	2	1.571	.429	.374	14	1.146	0.271
Occupations	2	14	1.5	1.786	-.286	.342	14	-0.837	0.417
Years of school	2	14	7	6.929	.071	3.043	14	0.024	0.982
House ownership	2	14	2	1.357	.643	.362	14	1.775	0.098
Health insurance	2	14	1.5	1.786	-.286	.342	14	-0.837	0.417
At 95% Confidence Interval			**1= control**			**2= treatment**			

Source: Survey data, 2022

All variable are balanced in block 1; block 2; block 3; block 4; and, block 5; as their significant values p >0.05, and t <2.000 (O'Connor, 2012).

3.2.4 Estimating the programme effect and interpreting the results

Table 13 portrays the treatment assignments for treated and untreated participants with cases on-and-off in the region of common support. Moreover, Table 14 presents values of estimated programme effects on households' current mean monthly incomes (MeCm) and spending (MsCm) in TASAF-III supported projects; with their tied differences, standard errors and t-values.

Table 13: Treatment assignment for on-support and off-support observations

psmatch2: Treatment assignment	psmatch2: Common support		Total
	Off support	On support	
Untreated	0	288	288
Treated	7	185	192
Total	**7**	**473**	**480**

Source: Survey data (2022)

Results (Table 13) denote that a total of 480 observations were considered for propensity scores estimations; with 288 being in control and 192 in treatment group. Whilst 473 cases were within the common support; 7 cases, specifically from the treatment assignment, were off the common support region. This indicated an adequate match between the treated and untreated observations (O'Connor, 2012)

Table 14: Estimated TASAF-III programme effect on household income and spending

Program effect on household's income (earning) with neighbour(10)matching						
Variable	**Sample**	**Treated**	**Controls**	**Difference**	**S.E.**	**T-stat**
MeCm	Unmatched	307327.344	263758.681	43568.663	10769.377	4.05
	ATT	309593.784	301799.486	7794.297	12776.491	0.61
Program effect on household's spending with neighbour(10)matching						
Variable	**Sample**	**Treated**	**Controls**	**Difference**	**S.E.**	**T-stat**
MsCm	Unmatched	296455.469	250229.861	46225.608	9985.842	4.63
	ATT	298445.676	287057.216	11388.460	11897.952	0.96

Source: Survey data (2022)

The propensity score matching results (Table 14) for the average treatment effect on the treated (ATT) sample show that, the mean differences between the treated and control households' incomes [TZS. 7 794.30; t=0.61(t<2.00)] and spending [TZS 11 388.50; t=0.96(t<2.00)] are non-significant–as assessed using neighbour (10) matching logarithm. The results revealed no significant differences in income and spending between the households participated in TASAF-III CED projects for income poverty relief and those who did not. The findings could further imply that compliance with TASAF-III defined project requirements has no significant impact on its success–defined by household's relief from transitional in-and-out income poverty in Tanzania. Non-significance of the impact can be associated with the mismatch of what beneficiaries perceive as their values (felt needs) and what TASAF-III projects implement as their defined project priorities

4. Conclusions and Recommendations

Based on the study results that, 67.2 percent of substantial compliance with TASAF-III supported CED

projects requirements resulted to only 23.3 percent attainment of the highly perceived beneficiaries' value outcomes, it is concluded that, substantial compliance does not necessarily result to predictive value outcomes in projects if beneficiaries' priorities are not clearly defined. The finding was not consistent with the assumption of the TRC substantial based policy that substantial compliance with requirements realizes optimal project success.

Moreover, based on the finding that the mean differences between the treated and control households' incomes [TZS. 7 794.30; t=0.61(t<2.00)] and spending [TZS 11 388.50; t=0.96(t<2.00)] are non-significant for the ATT sample, it implies that compliance with TASAF-III projects requirement has no significant impact on households' relief from transitional income poverty—if beneficiaries' priorities are not well merged with overall project purpose. There were therefore no enough statistical evidence to reject the null hypothesis (HO) that, there is no significant impact of compliance with TASAF-III supported CED projects' requirements on projects value outcome in Tanzania. This result is consistent with the TRC premise that commends the selection of the right requirements that realize positive project outcomes rather than having a set of the same which are non-predictive to desired targets' felt needs, when in compliance with. Projects' need assessment ought to be keenly undertaken in determining beneficiaries' felt needs for the desired project success outcomes.

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