

The Effects and Challenges of the South African Cuban Technical Support Program (SACTSP) in the South African Human Settlements Sector

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Abstract: The aim of the paper is to evaluate the effectiveness of the South African Cuban Technical Support Program (SACTSP) as is currently applied in the participating provincial Departments of Human Settlements (Mpumalanga, Western Cape, Limpopo and Free State). The post-apartheid government inherited an urban housing backlog of approximately 1.3 million units at its inception in 1994. This huge backlog was partially contributed by apartheid discriminatory administrations and laws such as the Black (Native) Laws Amendment Act, No 46 of 1937 and the Black Communities Development Act, No 4 of 1984 along with rapid urbanization during the post-apartheid period. In a bid to address past injustice related to housing, it has become necessary for the post-apartheid government to diversify housing delivery approach to include alternative development and delivery strategies, methodologies and products including upgrading of informal settlements, and implementation of People Housing Process (PHP). Amongst other adopted methodology for fast tracking housing service delivery was the South African Cuban Technical Support Programme (SACTSP). The SACTSP is governed by the bilateral agreement and is aimed at recruiting the Cuban Technical Advisors to South Africa to assist in the delivery of sustainable human settlements.

Keywords: Cuban technical advisors, Evaluation, Human settlements, South African Cuban technical support program, Sustainable human settlements

1. Introduction

South African-Cuban relations were established a long time ago between the then liberation movement of the African National Congress (ANC) and the government of the Communist Party of Cuba. The bilateral, political and multilateral relations between South Africa and Cuba are excellent and are underpinned by historical ties forged in the common struggle against apartheid, colonisation and repression. The activism of the relations between these two countries was also evident in South Africa neighbouring countries such as Namibia and Angola (Mill and Williams, 2006:23). The post-apartheid South African democratic government remains a beneficiary of Cuba's on-going assistance in the form of exchange programmes for students in different fields.

Currently, there are close to 1 400 South African students studying medicine at Cuban universities. About 323 South African graduates from the Cuban programme work as medical doctors in various South African hospitals. Over, 40 000 Africans have studied in Cuba, with Cuba offering to cover some of the expenses (Department of International Affairs

and Cooperation, 2016:27). The end of Soviet aid to Cuba created a "special period" where a programme has been set up sending physicians, nurses, dentists, engineers and other professionals to more than 52 countries in the developing world. There are about 1 200 Cuban doctors working on the African continent, including in Angola, Botswana, Cape Verde, Côte d'Ivoire, Equatorial Guinea, Gambia, Ghana, Guinea, Guinea Bissau, Mozambique, Namibia, Seychelles, Zambia, Zimbabwe, and other areas in the Sahara (Veelen, 2013:11). There are more than 400 architects, engineers, electricians and other technical experts deployed throughout South Africa by various line function departments such as Human Settlements, Public Works and Social Development (Veelen, 2013:17).

In November 2002 the South African government and Cuba concluded an agreement, undertaking to cooperate in Economic, Scientific, Technical and Commercial areas. Subsequent to the signing of this agreement, a bilateral agreement was entered into between the two countries in 2004 on the Employment of Cuban Technical Advisors (CTA's) in the relevant South African Provincial Departments of Housing. The SACTSP programme is based on the

co-operation agreement between the governments of South Africa and Cuba that provides a platform for the provinces to implement the Technical Support Programme. This Agreement was valid for three years and was to be further extended every three years. In November 2013, the bilateral agreement between the two countries was renewed with new areas of cooperation's in the Human Settlements Sector. The Objectives of the Programme as stipulated in the new Bilateral Agreement between the two countries are: to provide a framework to enable the South African government through its competent authority, to make use of the technical services rendered by the CTA's identified by the Union de Empresas Constructor as Caribe (UNECA S.A) within the context of the human settlements programmes launched by the South African Government and, in particular, to achieve the following:

- Technical support, to accelerate the implementation of the People's Housing Process (PHP) projects and other Human Settlements projects;
- Knowledge and information sharing on best practices, for engineers and architects working in human settlements projects;
- Promotion of community participation based on the Cuban experience; and
- Innovative and cost effective implementation based on Cuban experiences (Department of Human Settlements, 2016:42).

The South Africa-Cuba Technical Support Programme is managed through a National Committee comprised of representatives from provinces participating in the programme and the National Department of Human Settlements represented by Technical Capacity Development, International Relations and the PHP chief directorates. The programme is reported to the Joint Bi-National Commission hosted bi-annually between Cuba and South Africa (Department of Human Settlements, 2016a:12). Up to this date, almost 220 of CTA's was recruited from Cuba to work in the South African Human Settlements sector. The South African Cuban Technical Support Programme (SACTSP) was initiated mainly to accelerate the implementation of People's Housing Process (PHP) based on Cuban experience and to improve the lives of housing beneficiaries in South Africa. It remains to be seen if the programme is achieving what it was initiated for, since its inception.

The paper is set to analysis the environment, that led to the origin and the development of the SACTSP, asses (against the international theoretical background) the development and applications of post-apartheid South Africa self-help housing policy with special focus on government Aided Self-help housing and to evaluate, by comparing housing case studies where CTA's were involved in assisting beneficiaries and cases where CTA's were not involved in assisting housing beneficiaries.

The study focused on the evaluation of the effectiveness of the SACTSP in three different provinces (Limpopo, Mpumalanga and Western Cape) participating in the programme. Multiple case studies (Housing projects) were evaluated to determine the value brought by the involvement of the CTA's (through the SACTSP) in the lives of South African's housing beneficiaries. The study was mostly conducted by a comparison between the projects where the Cuban Technical Advisors (CTA's) were involved in building and those where the CTAs were not involved. Multiple sources (triangulation) were used to collect the required data (Yin 2009:120).

2. Literature Review

Much has been written on the origin of self-help in housing (Pugh, 2001:401). According to Pugh (2001:402) self-help housing is as old as humankind. In many cases, the idea of government support to enable families to build their own houses came from the people themselves, and not from governments or international experts (Harris, 1998; 2003). Various researchers have indicated that self-help has been a common phenomenon for centuries in a number of countries (Parnell & Hart, 1999:370), and that aided self-help was lobbied for, and practised, long before the rise of the ideas of Turner in the 1960s and 1970s. Thus, as pointed out by Harris (2003:247), the formulation of ideas on self-help may well be the result of western writers following, rather than leading, international trends. Harris and Giles (2003:180) cite the examples of Puerto Rico and India in the late 1930s and 1940s to illustrate this point. At the same time, aided self-help and the renewed emphasis on this approach in the 1960s and 1970s cannot be considered in isolation from the drive for government involvement in housing. Although there are indications of government involvement in housing before the World War II, the demolition of urban settlements during that war provided a further impetus for direct state involvement in

a post-war period. Soon, government involvement in housing became conventional wisdom. However, international literature suggests that very few countries have actually managed to address their housing problems by means of state-driven approaches (Harris & Giles 2003:167). Government-driven housing has frequently been criticised for being too expensive (Rodell & Skinner, 1983:43), as well as for its peripheral location (Gilbert, 1997:21), the inability to provide enough units, and the lack of cost-recovery for maintenance purposes. It is against this background that Turner's work in Latin America became known (Turner, 1976:77). Turner based his work on a number of principles in respect of housing. In analysing Turner's ideas, one should realise that he theorised against a background of failure of the public sector to provide housing. He used concepts like "dweller satisfaction", "use value", "housing as a process" and "housing as a verb" in his writings (Turner, 1972:146). According to Turner, the value of a house lies in what it does for people rather than how it looks from the outside. He suggested that the function of a house cannot be equated with the material standard of the structure (Harris, 1999b:289).

The practical implication of Turner's work is that governments should not provide those aspects of housing which people can provide for themselves. Consequently, Turner was a proponent of site-and-service schemes (referred to as "aided self-help" schemes) in terms of which governments had to take responsibility for the provision of basic services, and individual households were responsible for the construction of the housing unit (Pugh, 2001:89). This variety has been practised world-wide for centuries by low and high income households (Hardy & Ward, 1984:217; Masotti *et al.*, 2011:75). The second form of self-help, which can be termed "aided self-help", comprises an approach in which site and service schemes have played a crucial role. The state assisted, to a large extent, to create an environment in which people could build for themselves. Commonly, these two forms of self-help have been motivated by a range of political economic arguments. For example, they reduce the costs for governments, and transfer costs to the individual, while at the same time making housing more affordable to the individual households (Masotti *et al.*, 2011:170). Thirdly, however, the world has also seen self-help implemented through institutional organisations. Typically, this has involved the establishment of housing cooperatives. Such cooperatives were commonly used in India,

Jordan, Bangladesh, Indonesia, Malaysia, Pakistan, Thailand, Iran, Cuba, Egypt, Botswana, Zimbabwe and Zambia (Khurana, 2001:23).

Self-help housing strategies have changed throughout different periods of times (Landman & Napier, 2010:11). While self-help housing may come naturally for the poor, its success requires different forms of assistance from NGOs and governmental agencies (Sengupta, 2010:324). Ideally, self-help approaches would include providing technical advice to facilitate citizen participation in different aspects of housing development. Such supports have long been advocated in many housing forums and academic circles. It is in this context that looking at Cuba's success in codifying and extensively implementing a participatory design method may provide valuable lessons on how citizen participation in housing processes can be implemented and may suggest solutions to issues that have been identified elsewhere. It is of great importance for the purpose of this research to look at the dynamics of Cuban housing policy as it forms a foundation upon which the existence of the SACTSP was established.

3. Methods and Materials

Different research problems lead to different: (a) research designs, (b) methods, (c) and interpretations of the data, which has been collected and analysed (Leedy & Ormrod, 2014:97). This study is generally an evaluation/tory study, which has adopted a case study approach where the SACTP in the human settlements is the point of focus. The design is aimed at answering the question of whether the SACTSP has been successful or effective in resolving the problems that it was meant to address. The understanding of this concept throughout this study is in line with the commonly accepted definition provided by Rossi *et al.* (2004:69) who defined program evaluation as the use of social research methods to systematically investigate the effectiveness of social intervention programs in ways that are adapted to their political and organisational environments and are designed to inform social action to improve social conditions. According to Mouton (2006:304), the main aim of any outcome and product evaluation study is to establish whether the intended – but also other unintended – outcomes of the program or strategy have materialized. The impact or outcomes of the program or strategy could either be short, medium or long term. This study employed mixed methodologies

Table 1: Size of the House

Size	CTA	Non-CTA	Total
40m ²	4 (7.0%)	8 (19.0%)	12 (12.1%)
41m ²	-	8 (19.0%)	8 (8.1%)
42m ²	3 (5.3%)	26 (61.9%)	29 (29.3%)
50m ²	50 (87.7%)	-	50 (50.5%)
Total	57 (100.0%)	42 (100.0%)	99 (100.0%)

Source: Authors

using data collection instruments such as sample, documents, questionnaires, and interviews in order to collect rich data.

3.1 Research Strategy: Procedures and Study Areas

The research design of this study is a multiple Case Studies approach. Initially the scope of the study was related to three provinces participating in the SACTSP, which are Mpumalanga (MP), Western Cape (WC), and Limpopo (LP). The intention was to have both the control group and the intervention group in the same province. Due to the over usage of the CTA's in these provinces the researcher decided to use Gauteng Province (GP), a non-participating province in the programme, as a control group. This is also due to the fact that the province (Gauteng) is also commonly known for publicly criticising the effectiveness of the SACTSP programme. It is again the only province with three metropolitan municipalities with existing effective governing structures with authorities to decide on the development of their areas. Data was collected in three housing projects from the three Gauteng Metropolitan Municipalities Tshwane, Ekurhuleni and City of Johannesburg. The selected projects were Mamelodi Extension 5 in Tshwane, Villa Lisa (Boksburg) in Ekurhuleni and Driekiek Extension 3 in Orange Farm, Johannesburg. The selected projects where the CTAs participated (experimental group) were Chicago Bulls at Strand in Cape Town (WC), Thekwane South Housing Projects, Nelspruit in Mpumalanga and Westernburg at Polokwane in Limpopo Province. In each unit of evaluation, questionnaires to collect data were distributed to the rightful owners of the houses, who were above eighteen years of age (beneficiaries). It is common that each (PHP) project where the CTAs are involved is limited to between eighty and hundred units, and the researcher distributed fifty (50) questionnaires to each project. The participants,

all rightful owners of state subsidies, were identified by means of systematic random sampling (purposive sampling). Interviews with main role players in housing circles were also conducted. The selection is also influenced by what is called the "good enough" rule in formulating evaluation research (Rossi *et al.*, 2012:28). Stated simply the "good enough" rule advocates that the evaluator should choose the strongest possible design from a methodological stand point after having taken into account the potential importance of the results, the practicality and feasibility of each design and the probability that the design chosen will produce useful and credible results (Rossi *et al.*, 2012:33)

4. Results and Discussion

The characteristics of the sample in this paper will be discussed under the following sub headings: *Quality and size of the house; maintenance and repairs; transference of skills by CTAs to beneficiaries; and house value and beneficiaries' interest.* The variables were discussed using frequencies, proportions and means. The items in a construct were assessed using a five-point Likert Scale. The average of each item was calculated and it was used for ranking with the aspect on top being the one with the lowest average in the construct. Items in a construct were averaged to come up with a composite variable which represent all the items in the construct. The graphical techniques used to depict the distribution of the overall scores were the histogram and boxplot. This selection is influenced by the "good enough" rule in formulating evaluation research (Rossi *et al.*, 2012:28).

4.1 Quality and Size of the House

The respondents were asked to indicate the size of the house as shown in Table 1.

Almost half of the respondents, 50.5% indicated that their house was 50m² in size while 29.3% (n=29)

Table 2: The Level of Satisfaction on Issues on Size and Quality of House

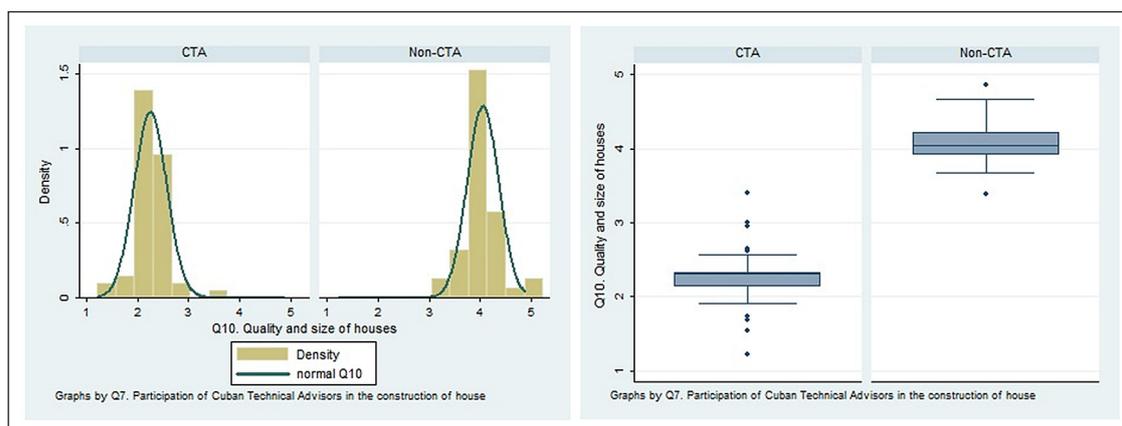
Statement	CTA				Non-CTA			
	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Mean	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Mean
Q10q. State of walls in your PHP house	92.6% (50)	7.4% (4)	-	1.83	-	7.1% (3)	92.9% (39)	4.12
Q10p. The overall design of the house (e.g. structure)	90.9% (50)	9.1% (5)	-	1.84	-	38.1% (26)	61.9% (26)	3.71
Q10w. The overall service provided by SACTSP	96.4% (54)	3.6% (2)	-	1.88	-	8.3% (1)	92.7% (11)	4.42
Q10r. The material making the windows in your PHP house	89.1% (49)	10.9% (6)	-	1.91	-	9.8% (4)	90.2% (37)	4.00
Q10v. The overall condition of the home/ apartment	96.4% (54)	3.6% (2)	-	1.98	-	7.3% (3)	92.7% (38)	4.00
Q10u. The type of bricks used to build the house	93.0% (53)	7.0% (4)	-	1.98	-	12.5% (5)	87.5% (35)	4.00
Q10n. The adequacy of lighting in the house (e. g. electricity bulbs)	91.3% (42)	6.5% (3)	2.2% (1)	1.98	2.4% (1)	40.5% (17)	57.1% (24)	3.62
Q10o. The adequacy of ventilation in the home (e. g. number of windows)	92.9% (52)	5.4% (3)	1.8% (1)	2.02	-	33.3% (14)	66.7% (28)	3.79
Q10j. The type of material used for the doors	83.6% (46)	12.7% (7)	3.6% (2)	2.11	-	7.3% (3)	92.7% (38)	4.05
Q10m. The type of wood used for the cupboards n the bedrooms	82.2% (37)	15.6% (7)	2.2% (1)	2.18	-	7.5% (3)	92.5% (37)	4.05
Q10a. The overall size of the house	73.7% (42)	22.8% (13)	3.5% (2)	2.21	-	14.0% (6)	86.0% (37)	4.02
Q10s. The quality of floors	78.2% (43)	18.2% (10)	3.6% (2)	2.22	-	10.0% (4)	90.0% (36)	4.13
Q10k. The type of material used in the kitchen	69.1% (38)	29.1% (16)	1.8% (1)	2.25	-	4.8% (2)	95.2% (40)	4.14
Q10l. The type of material used in the bathrooms and toilets	66.1% (37)	30.4% (17)	3.6% (2)	2.34	-	9.8% (4)	90.2% (37)	4.10
Q10t. The adequacy of the space of the PHP houses	69.8% (37)	26.4% (14)	3.8% (2)	2.36	-	7.5% (3)	92.5% (37)	4.05
Q10g. The condition of the bedrooms	59.6% (34)	38.6% (22)	1.8% (1)	2.39	-	2.4% (1)	97.6% (41)	4.17
Q10i. The condition of the toilets and bathrooms	59.2% (29)	22.4% (11)	18.4% (9)	2.49	-	4.8% (2)	95.2% (40)	4.21
Q10h. The condition of the lounge/living area	52.6% (30)	43.9% (25)	3.5% (2)	2.49	-	4.9% (2)	95.1% (39)	4.12
Q10b. The adequacy of the number of bedrooms in the house	49.1% (28)	45.6% (26)	5.3% (3)	2.51	-	9.3% (4)	90.7% (39)	4.07
Q10e. The size of the bedrooms	49.1% (28)	43.9% (25)	7.0% (4)	2.60	-	-	100.0% (42)	4.21
Q10f. The adequacy of the space in the lounge/ living area	38.6% (22)	52.6% (30)	8.8% (5)	2.70	-	4.9% (2)	95.1% (39)	4.12
Q10d. The size of the kitchen	31.6% (18)	57.9% (33)	10.5% (6)	2.77	-	5.3% (2)	94.7% (36)	4.21
Q10c. The adequacy of the number of toilets and bathrooms in the house	31.6% (18)	49.1% (28)	19.3% (11)	2.79	-	11.6% (5)	88.4% (38)	4.05

Source: Authors

indicated that it was 42m². Thus, the majority of the houses are either 50m² or 42m². Only 20% are either 40m² or 41m². The participants were asked to assess their satisfaction on 23 aspects on the size and quality of the house measured on a Likert scale that ranged from 1 (very satisfied) to 5 (very dissatisfied). A mean of less than 2.5 indicated that overall the participants were satisfied while a mean of 3.5 and more meant that the participants were dissatisfied. See Table 2.

Only one item had an average less than 2.5. About 79.4% (n=54) indicated that they were satisfied by the overall service provided by SACTSP and the mean was 2.32. In terms of proportions, more than half of the participants were satisfied with the overall condition of the home/apartment (55.7%); the type of bricks used to build the house (54.7%); the adequacy of ventilation in the home (e.g. number of windows) (53.1%); state of the walls in the PHP house (52%), the overall design of the house (e.g. structure)

Figure 1: Histogram and Box Plot Showing Level of Satisfaction on Size and Quality of House



Source: Authors

(51.5%) and the material making the windows in their PHP house (51.1%). Close to half (49.9%) were satisfied with the type of material used for the doors. On the other hand, 53.9% were dissatisfied with the condition of the toilets and bathrooms and close to half (49%) were dissatisfied with the adequacy of the number of toilets and bathrooms in the house. It can be noted that the level of satisfaction seems to be average as evidenced by most means being close to three. A composite variable for size and quality was calculated by finding the average of the 23 items. The mean and median levels of satisfaction of the respondents were 3.03 and 2.51 respectively. On average, the participants indicated that the level of satisfaction was to some extent satisfactory. The standard deviation was .948 resulting in a coefficient of variation of 31.27%. There is some variability in the level of satisfaction as the coefficient of variation is not close to zero (no variability).

Approximately 68.26% of the participants had an average rate of satisfaction ranging from 2.08 to 3.98 (\pm one standard deviation from the mean). It can be noted that the majority of the participants gave ratings from two to four.

The histogram is bimodal. It shows two groups of people, one that are satisfied with the size and quality of the house and the other that is dissatisfied. The data is not normally distributed and this is supported with the box plot with a longer tail to the right. From the boxplot it can be observed that more than 50% of the participants had a rating less than three. It can be concluded that the participants are on average satisfied with aspects on the size and quality of houses. See Figure 1 above.

4.2 Descriptive Statistics on Maintenance and Repair

In terms of maintenance and repair, the participants were given 12 items to rate the level of frequency on maintenance and repair. See Table 3 on the next page.

In terms of averages, all the items had averages close to 4 indicating that most of the repairs never occurred. The participants indicated that no repairs were made on the following repairs; faulty water geysers (63.1%), water pressure (61.5%), leaking of roofs (53.2%), faulty stove (51.2%), painting (50.0%), faulty doors (49.5%) and ceiling (49%). These are the items that have never been needing maintenance or repair. On the other hand, 54.7% indicated that re-flooring and tilling was done once a year. This means that most of the items seem to be durable such that they were not needing maintenance and repair.

A composite variable was created by averaging the level of frequency. A mean less than 2 indicated that maintenance and repairs were done within six months. A mean of 3.5 and more meant that repairs were rarely done or never occurred. The average ranged from 1.85 to 5 giving a range of 3.15. The mean, median and mode were 4.22, 4.46 and 3.25 respectively. Thus on average maintenance and repairs rarely occurs. The standard deviation was 4.218 resulting in a coefficient of variation of 15.81%. Thus, there was less variability between the responses of participants.

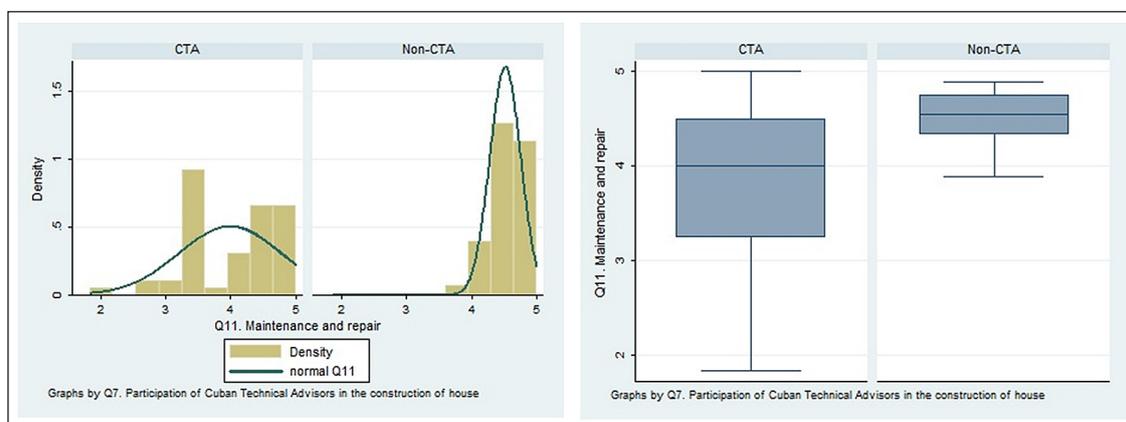
The histogram shows that the levels of frequency are negatively skewed, that is, there are few respondents who indicated that they do maintenance and

Table 3: The Level of Occurrence on Maintenance and Repair of House

Statement	CTA				Non-CTA			
	Within four months	Once or twice a year	Never so far	Mean	Within four months	Once or twice a year	Never so far	Mean
Q11d. Blockage of water sewer system	44.7% (21)	19.1% (9)	36.2% (17)	3.40	-	58.1% (25)	41.9% (18)	4.37
Q11c. Broken cupboards in the kitchen and bedrooms	47.7% (21)	6.8% (3)	45.5% (20)	3.45	-	50.0% (21)	50.0% (21)	4.50
Q11b. Faulty water taps in the kitchen and bathrooms	4.4% (2)	68.9% (31)	26.7% (12)	3.67	-	55.8% (24)	44.2% (19)	4.42
Q11h. Faulty issues related to electricity	2.3% (1)	60.5% (26)	37.2% (16)	3.86	-	72.1% (31)	27.9% (12)	4.28
Q11e. Broken windows	3.9% (2)	56.9% (29)	39.2% (20)	3.88	-	58.1% (25)	41.9% (18)	4.42
Q11f. Leaking of roofs	3.8% (2)	48.1% (25)	48.1% (25)	3.98	-	40.5% (17)	59.5% (25)	4.57
Q11l. Ceiling	4.1% (2)	46.9% (23)	49.0% (24)	4.06	-	-	-	-
Q11a. Faulty doors	3.7% (2)	64.8% (35)	31.5% (17)	4.06	-	27.9% (12)	72.1% (31)	4.72
Q11i. Faulty water geysers	4.8% (2)	57.1% (24)	38.1% (16)	4.21	-	11.9% (5)	88.1% (37)	4.88
Q11j. Re-flooring/Tiling	2.0% (1)	60.8% (31)	37.3% (19)	4.29	-	-	100.0% (2)	5.00
Q11m. Water Pressure	7.7% (2)	30.8% (8)	61.5% (16)	4.31	-	-	-	-
Q11g. Faulty stove	4.7% (2)	41.9% (18)	53.5% (23)	4.42	-	51.3% (20)	48.7% (19)	4.49
Q11k. Painting	2.0% (1)	48.0% (24)	50.0% (25)	4.42	-	-	-	-

Source: Authors

Figure 2: Histogram and Box Plot Showing Overall Ratings of Level of Occurrence of Maintenance and Repairs



Source: Authors

repairs in less than a year. The boxplot shows a long tail to the left and at least 50% of the participants indicated that they had not done any maintenance and repairs so far as evidenced by an average rating of more than four. The participants were asked to indicate the overall expectation on their house and the proportions. See Figure 2 above.

The majority of the respondents, that is, 70.1% (n=68) said that the house was not as good as they expected it to be, 16.5% (n=16) said that it was

exactly as they expected it to be while 9.3% (n=9) indicated that it was even better than they expected it to be. Thus, the majority of the people's expectations indicated that the house was not as they expected it to be. See Table 4 on the next page.

4.3 Descriptive Statistics on Transference of Skills by CTAs to Beneficiaries

There were 15 items assessing the assistance or involvement of CTA. The items were measured on

Table 4: Overall Expectation of House (n = 90)

Level of Expectation	CTA	Non-CTA	Total
It is even better than I expected it to be	9 (16.1%)	-	9 (9.3%)
It is exactly as I expected it to be	12 (21.4%)	4 (9.8%)	16 (16.5%)
It is not as good as I expected it to be	34 (60.7%)	34 (82.9%)	68 (70.1%)
It is much worse than I expected it to be	-	2 (4.9%)	2 (2.1%)
I have never really thought about it (do not know)	1 (1.8%)	1 (2.4%)	2 (2.1%)
	56 (100.0%)	41 (100.0%)	97 (100.0%)

Source: Authors

Table 5: The Level of Extent on Issues Regarding Assistance or Involvement of CTA

Statement	CTA				Non-CTA			
	To a large extent	To some extent	Not to any extent	Mean	To a large extent	To some extent	Not to any extent	Mean
Q13d. Did the CTA ensure that the site foreman was responsible for deciding which teams would work on which stand?	63.5% (33)	9.6% (5)	26.9% (14)	2.55	-	-	100.0% (41)	5.00
Q13i. Were there mechanisms in place for monitoring the payment of workers?	47.7% (21)	11.4% (5)	40.9% (18)	2.60	-	-	100.0% (41)	5.00
Q13j. Were the suppliers hiring and firing the workers as they pleased?	61.9% (26)	9.5% (4)	28.6% (12)	2.63	-	-	100.0% (39)	5.00
Q13n. Did the CTA participate in ensuring fair distribution of completed houses to beneficiaries?	58.5% (31)	13.2% (7)	28.3% (15)	2.71	-	-	100.0% (36)	5.00
Q13e. Was there any exploitation of beneficiaries by outside stakeholders?	46.3% (19)	2.4% (1)	51.2% (21)	2.71	-	-	100.0% (41)	5.00
Q13k. Were there quarrels with the project certifier about the latter's competence to certify houses?	35.3% (18)	9.8% (5)	54.9% (28)	2.71	2.7% (1)	-	97.3% (36)	4.89
Q13f. Were there any problems with payments and delivery of materials?	30.2% (13)	14.0% (6)	55.8% (24)	2.71	-	-	100.0% (41)	5.00
Q13g. Were beneficiaries trained in managing finances of the projects?	19.5% (8)	9.8% (4)	70.7% (29)	2.71	-	-	100.0% (41)	5.00
Q13l. Were there reports that the building materials were being stolen?	6.8% (3)	6.8% (3)	86.4% (38)	2.71	-	2.7% (1)	97.3% (36)	4.95
Q13o. CTA ensured involvement of youth and women in the programme?	66.7% (32)	8.3% (4)	25.0% (12)	3.25	-	-	100.0% (36)	5.00
Q13h. Was the project monitored by the CTA during the construction phase?	66.0% (31)	29.8% (14)	4.3% (2)	3.43	-	-	100.0% (40)	5.00
Q13c. Did the CTA ensure that PHP was accountable to the community?	69.8% (37)	28.3% (15)	1.9% (1)	3.47	-	-	100.0% (41)	5.00
Q13a. Was there any assistance or involvement of the Cuban Technical Advisor during the construction of your house?	70.9% (39)	29.1% (16)	-	3.65	-	-	100.0% (41)	5.00
Q13m. Did the CTA ensure that the beneficiaries participated in the building of the house?	55.4% (31)	42.9% (24)	1.8% (1)	3.65	-	-	100.0% (36)	5.00
Q13b. Is there any benefit (Knowledge, Skills or Training) that you got from the CTAs during the construction of your house?	85.5% (47)	14.5% (8)	-	3.67	-	-	100.0% (41)	5.00

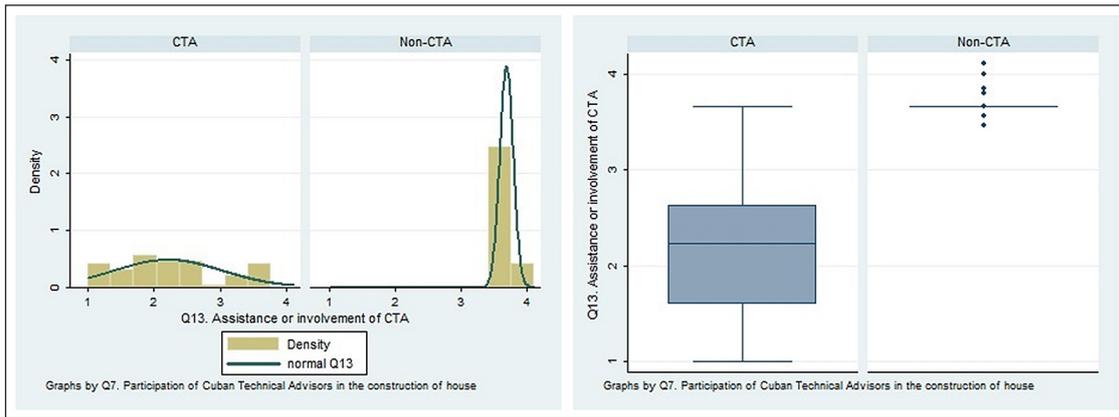
Source: Authors

a five-point Likert scale ranging from 1 (to a very large extent) to 5 (not to any extent at all). A mean of less than 2.5 indicated that the level of assistance or involvement of CTA occurs to a large extent while a mean more than 3.5 indicated that it occurred to a lesser extent. See Table 5.

The majority of the people indicated that there was no training of beneficiaries in managing finances of projects (68.3%). Secondly, there was no participation of CTA in ensuring fair distribution of

completed house to beneficiary (55.1%). Thirdly, the CTA did not involve any youth and women in the programme (54.8%). Fourthly, the CTA did not ensure that the site foreman was responsible for deciding which teams would work on the stand and lastly, no mechanisms were in place for monitoring the payment of workers (52.9%). However, about 87.7% indicated that there were no reports that the building materials were being stolen. In addition, 70.7% said there was no exploitation of beneficiaries by outside stakeholders. Close to 65.9%

Figure 3: Histogram and Box Plot Showing Assistance or Involvement of CTA



Source: Authors

Table 6: The Level of Acknowledgement on Type of Knowledge, Skills or Training Obtained from the CTA

Training	CTA		Non-CTA	
	Yes	No	Yes	No
Q14c. Building skills	94.5% (52)	5.5% (3)	-	100.0% (38)
Q14e. House roofing	94.5% (52)	5.5% (3)	-	100.0% (38)
Q14b. Laying a foundation	92.7% (51)	7.3% (4)	-	100.0% (38)
Q14d. Plastering	78.6% (44)	21.4% (12)	-	100.0% (38)
Q14h. Monitoring of stock (building materials)	63.6% (35)	36.4% (20)	-	100.0% (38)
Q14a. Building designs	60.7% (34)	39.3% (22)	-	100.0% (38)
Q14i. Allocation of houses	60.0% (33)	40.0% (22)	2.6% (1)	97.4% (38)
Q14g. Purchasing of building materials	52.7% (29)	47.3% (26)	-	100.0% (38)
Q14f. Management of finances	44.6% (25)	55.4% (31)	-	100.0% (38)

Source: Authors

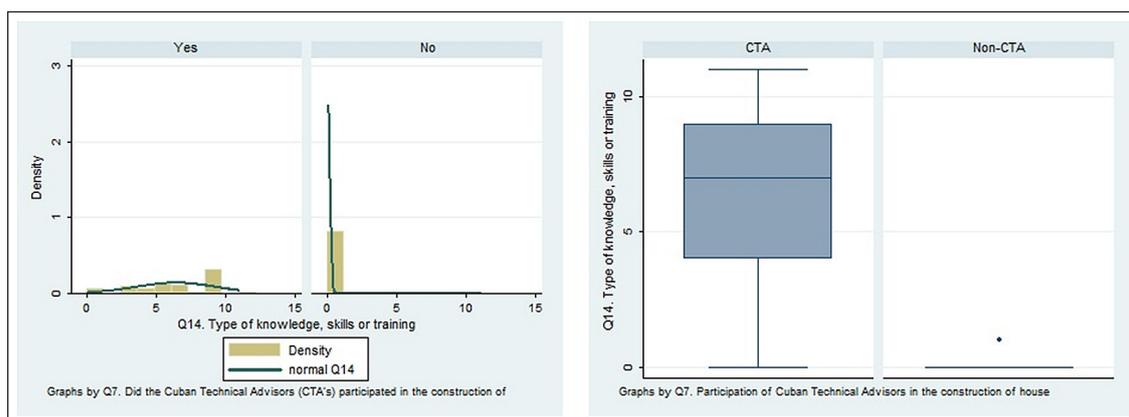
indicated they were no quarrels with the project certifier about the latter's competence to certify houses while 57.1% indicated that there were no problems with payments and delivery of materials and 56.8% indicated that the suppliers were not firing and hiring workers as they pleased.

From the above mentioned proportions one can conclude that not much was done in training and involvement of youth and women in the programmes. However, administration of the programme seems to have been done very well. Of all the items assessed in this construct, overall, none of them had an average less than three. The average ratings in participation and involvement of CTA had mean and median ratings of 2.835 and 3.462 respectively. Thus, on the average the involvement was to some extent.

A standard deviation of .969 was obtained and the coefficient of variation was 34.18%. There seem to be variability in responses of participants as the coefficient of variation is not close to zero (no variability). Using the empirical rule, approximately 68% of the respondents had ratings ranging from 1.87 to 3.80 (\pm one standard deviation from the mean). This shows that the majority of the participants gave ratings from two to four.

The highest peak on the histogram as shown in Figure 3 indicates that the highest proportion was an average of at least 3.5. The histogram and boxplot show that data is negatively skewed. The participants were asked to indicate the type of knowledge, skills or training they obtained from CTA and Table 6 gives the information.

Figure 4: Histogram and Box Plot Showing Type of Knowledge, Skills or Training



Source: Authors

Table 7: Forms of Skills Transfer

Training	CTA				Non-CTA			
	Training (seminars, workshops, etc.)	Coaching	Mentoring (attachment to expert)	Never occurred	Training (seminars, workshops, etc.)	Coaching	Mentoring (attachment to expert)	Never occurred
Q15a. Building designs	3.8% (2)	52.8% (28)	7.5% (4)	35.8% (19)	-	-	-	100.0% (40)
Q15c. Building skills	8.9% (5)	76.8% (43)	8.9% (5)	5.4% (3)	-	-	-	100.0% (40)
Q15d. Plastering	9.1% (5)	60.0% (33)	10.9% (6)	20.0% (11)	-	-	-	100.0% (40)
Q15e. House roofing	9.1% (5)	40.0% (22)	45.5% (25)	5.5% (3)	-	-	-	100.0% (40)
Q15f. Management of finances	-	44.2% (23)	5.8% (3)	50.0% (26)	-	-	-	100.0% (39)
Q15g. Purchasing of building materials	3.7% (2)	18.5% (10)	37.0% (20)	40.7% (22)	-	-	-	100.0% (40)
Q15h. Monitoring of stock (building materials)	-	57.4% (31)	5.6% (3)	37.0% (20)	-	-	-	100.0% (40)
Q15i. Allocation of houses	-	48.1% (25)	21.2% (11)	30.8% (16)	-	-	-	100.0% (39)

Source: Authors

The participants indicated that they were given building skills (55.9%), taught on house roofing (55.95) and laying a foundation (54.8%). Close to 50% (46.0%) were taught on plastering. However, the majority of the participants were not given the skills on monitoring of stock (building materials), building designs, allocation of houses, purchasing of building materials, and management of finances. A composite variable was created by giving a 1 to those who indicated that they were given the knowledge or taught on a type of skill and 0 if they indicated that they were not taught. All in all, there were a total of nine skills. A composite variable was formed by adding the ones. It means a person who was taught all the skills would have a total of nine. On the average the mean and median were 3.78 and 3. This means on average

participants were taught four out of the nine skills. The standard deviation and coefficient of variation were 3.843 and was 101.69% respectively. There is high variability between the responses the coefficient of variation is not close to zero (no variability).

The histogram in Figure 4 shows that the largest proportion relates to participants who did not receive any kind of knowledge, skills or training. Both boxplots and histograms show that the data is positively skewed. The boxplot shows a long tail to the right and at least 50% of the participants received less than three skills. This means that people did not receive a lot of knowledge, skills or training. The participants were asked the method used to do the training. Table 7 shows how three methods

Table 8: Level of Acknowledgement on Issues Regarding House Value and Beneficiary Interest

Statement	CTA			Non-CTA		
	Yes	No	Not sure	Yes	No	Not sure
Q16h. Do you think the house has been of benefit in your life?	96.4% (53)	3.6% (2)	-	95.3% (41)	2.3% (1)	2.3% (1)
Q16e. Do you think you are privileged (e. g., lucky) to have a PHP house?	96.4% (53)	1.8% (1)	1.8% (1)	95.3% (41)	2.3% (1)	2.3% (1)
Q16f. Do you think the whole PHP process ensured value for money?	96.4% (53)	1.8% (1)	1.8% (1)	95.3% (41)	2.3% (1)	2.3% (1)
Q16d. Do you think the community values or appreciates the PHP houses?	94.5% (52)	-	5.5% (3)	74.4% (32)	23.3% (10)	2.3% (1)
Q16g. Do you think some of the PHP houses have more value than the others?	74.5% (41)	5.5% (3)	20.0% (11)	95.3% (41)	2.3% (1)	2.3% (1)
Q16a. If someone made you an offer of R110 000 to buy your house today, would you sell it?	23.6% (13)	10.9% (6)	65.5% (36)	48.8% (21)	41.9% (18)	9.3% (4)
Q16b. If someone offers you to rent your house, would you allow it?	7.3% (4)	16.4% (9)	76.4% (42)	51.2% (22)	44.2% (19)	4.7% (2)
Q16c. Do you agree to exchange your house for RDP or other houses in the community not built by PHP?	5.7% (3)	43.4% (23)	50.9% (27)	27.9% (12)	67.4% (29)	4.7% (2)

Source: Authors

of training, coaching and mentoring were used to impart skills.

As observed earlier the majority of the participants indicated that training was never done on plastering (53.7%), monitoring of stock (building materials) (63.8%), building designs (63.5%), allocation of houses (60.4%), purchasing of building materials (66.0%) and management of finances (71.4%). However, 44.8% were coached on building skills while 40.6% were coached on laying a foundation.

4.4 Descriptive Statistics on House Value and Beneficiaries Interest

The participants were asked to indicate the level of acknowledgement on issues regarding house value and beneficiary interest. The information is presented in Table 8.

About 95.5% indicated that they were privileged to have a PHP house, secondly, that the whole PHP process ensured value for money and thirdly, that the house has been a benefit. About 85.7% indicated that the community values or appreciates the PHP houses an 83.7% indicated the PHP houses have more value than the others. In addition, 54.2% indicated that they would not agree to exchange their house for RDP houses in the community not built by PHP. By adding the numbers of yes, that is, yes was given a 1 and no and not sure a 0. There were eight items giving a total of eight. The mean and median were 5.63 and 5 respectively. On average

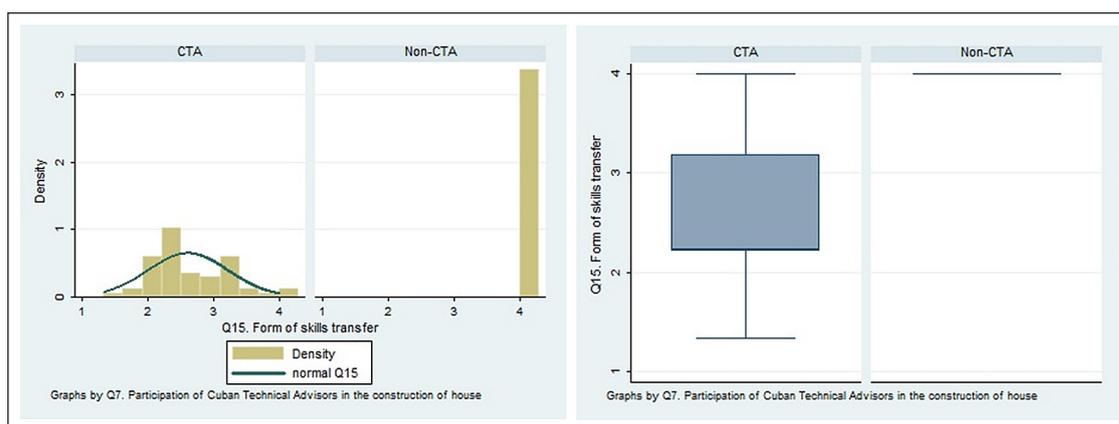
the participants agreed to six out of the eight items. A standard deviation of 1.446 was obtained giving a coefficient of variation of 25.67%. There is some variability between the ratings as the coefficient of variation is not close to zero (no variability). Using the empirical rule, approximately 68% of the participants agreed to 4 to 7 of the statements. The histogram and box plot are shown in Figure 5 on the following page.

The box plot had outliers on both sides of the distribution. The histogram in Figure 5 showed that the distribution was positively skewed. The highest peak was at five. Thus, the largest proportion of participants agreed to five out of the eight statements. The majority of the people agreed to more than five out of the eight statements on house value and beneficiary interest.

5. Conclusion and Recommendations

Evidence from the literature review indicates that self-help principles are to a certain extent entrenched in the three main South African policy documents on low-income housing. Furthermore, South African literature on the topic indicates that the founding of self-help through the PHP mechanism in housing delivery is also based on principles similar to those advanced by Turner (1976:39). When Turner argued in defence of self-help, he maintained that self-help should be viewed as a mechanism for achieving what he called 'people-driven housing delivery. It can be safely said that the practice of self-help

Figure 5: Histogram and Box Plot Showing House Value and Beneficiary Interest



Source: Authors

housing in South Africa has to a large extent failed. The literature reviews (Marais, 2003:129; Marais, Ntema & Venter, 2008:49) make it clear that self-help in South Africa, as indeed the rest of the world has since 1994 been structured mainly around state control and not around dweller control, thus in many ways it is similar to how self-help was conducted prior to 1994. Overall, the intent of policy is neo-liberal, whereas the practice contains numerous elements of welfarism and of the state control associated with welfarism. It could thus be appropriate, based on the above discussion to conclude that, in the absence of dweller control or greater choice by beneficiaries in their housing process, households are being reduced to beneficiaries of an externally designed and controlled process.

From the above discussion it is recommended that the Department of Human Settlements should not only formulate policy but also expect implementation on the part of the provinces and municipalities. The Department should also have a mechanism to ensure that the formulated policy is correctly implemented. Policy monitoring and evaluation teams should be established which will enforce the correct implementation of the formulated human settlements policy. It is evident from the interviews conducted with some of the programme stakeholders in the participating provinces, that the CTAs make a difference in the lives of the beneficiaries. Some of the interviewees indicated that their provinces cannot survive without the CTAs. Some of the beneficiaries indicated that they have learned skills that make them better able to survive in daily life, yet the majority of provinces are not participating in the programme citing budget constraints as the reason for non-participation. The researcher therefore

recommends the centralisation of the SACTSP. Thus the National Department of Human Settlements should be the host of the CTAs and deploy them to all nine provinces. This should be done based on provincial needs. The process of CTAs transferring skills must be well coordinated and students from the engineering or construction fields of study, receiving bursary from the Department of Human Settlements should be encouraged do their internship under the supervision of the CTAs to gain a background of international experience. The researcher also recommends that an additional annexure be added in the signed agreement between Cuba and South Africa which will allow the South African engineering students to learn the social aspects of their technical career in Cuba.

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