Investigation of Factors Affecting Implementation of the Nigerian Space Policy

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Abstract

The failures and difficulties that have shown up in the implementation of major public policies around the world have helped to direct attention to the need for explicit planning. Proper implementation of such policies entails giving adequate attention to factors like political variables and institutional capacities. This study attempts to assess the implementation level of the Nigerian Space Policy (NSP) as adjudged by the coordinating and implementing organizations, alongside the factors that might have affected the implementation. Copies of questionnaires were administered to collect data from selected top and middle level managers among the NSP coordinating and implementing bodies. Data collected were analysed using descriptive and relational statistics. The NSP was judged by the coordinating bodies and implementers to have an average level of implementation. The results showed that awareness of the Policy among the stakeholders, interaction/collaboration among the stakeholders and the operations of the NASRDA activities centres were the factors found to have statistically significant ($p<0.05$) relationships with the level of policy implementation in the operations of the NSP coordinating bodies and the NASRDA activity Centres. Only government support for the development of indigenous competences was found to have statistically significant relationship with the policy implementation level in the operations of the multifarious stakeholders. Improvement on the identified factors could enhance level of NSP implementation, though efforts should be expedited by relevant stakeholders to avert the deterioration tendency of the situation.

Key words: Nigeria, Space, Policy, Factors and Implementation

1.0 Introduction

A policy could be simply expressed as statement of the goals and objectives of an organization over a particular subject and the account of the strategies for the achievement of

these goals and objectives (Effiong, 2013). Policy implementation basically entails the setting up of structures and methods, the devotion of funds, the engagement of personnel, the execution of activities, and keeping in-tact the integrity of policy goals, objectives and other anticipated outcomes (Ekelegbe, 1996 and Egonmwan, 2009). The failures and challenges that have been facing implementation of major public policies around the world are wake-up call to the need for planning explicitly. It could entail the management of policy implementation such that proper attention is given to factors like political variables and institutional capacities to execute and operate development projects (Effiong, 2013).

Barton (1997) and Effiong (2013) submitted that each country of the world that could make diligent effort to properly articulate development plans is bound to experience social and economic reforms. The authors further expressed that a good number of factors such as administrative, economical, socio-cultural, political, staffing, communication and co-ordination of policies and programmes usually experience changes in the course of policy implementation. They thus have the tendency to considerably influence the outcomes.

Severally, Nigeria has witnessed well-articulated socio-economic restructuring expected to launch the nation on the path of laudable development. Quite a number of policies are being implemented in the country. The Space Policy of Nigeria was enacted in 2001. This study attempts to assess the level of the Space Policy implementation in Nigeria as observed by the Policy coordinating and implementing organizations alongside the factors that might have affected the implementation.

2. Literature Review

2.1 Dynamics of policy implementation theories

In general, policy implementation research is said to have evolved through three generations. The first generation covered early 1970 to the 80s; the second generation implementation covered 1980s to the 90s and the third generation covered 1990 onward (Matland, 1995).

(a) First generation implementation theory

In the first generation policy implementation research, the main focus is on the way a single authoritative decision was executed, either at one location or at more than one sites (Goggin *et al.*, 1990). The generation was involved in more systematic efforts in the 1980s to assimilate the factors that inhibited or facilitated the implementation of public policies (Sabatier and Mazmanian, 1980). It revealed how such factors as capacity, intra-organizational relationships, size, commitment, capacity and institutional complexes fashion responses to policy (McLaughlin, 1987). The research in the generation was basically characterized by theoretical, case-specific and non cumulative studies (Googin *et al*., 1990).

(b) Second generation implementation theory

Second generation research is focused on illustrating and analyzing the relationship between policy and implementation practice. According to McLaughlin (1987), these studies brought up significant lessons for policy, practice and analysis; some of which are:

(i) Policy cannot always mandate what matters to results at the local level.

(ii) Individual motivation and benefits are central to local responses.

(iii) Effective implementation needs a strategic balance of pressure and support.
(iv) Policy–directed could ultimately pose a problem on the smallest unit.

The second generation researches also initiated researches with the importance of time frames. This was emphasized in order for researchers to be able to express at what point of history a particular implementation took place and over what period of time (Goggin et al., 1990). Implementation's variability over time and across policies and units of government were recognized in this generation. Consequently, it explained implementation success and failure with much reliance on an implicit or explicit model of policy implementation process. The development of analytical frameworks was also peculiar to the second generation policy implementation research which involved the construction of models and research strategies.

As implementation research evolved, two schools of thought emerged for describing and studying implementation of policy: Top-down and Bottom-up perspectives (Winter, 2003).

1. **The Top-down Perspective:** This perspective can be described as policy-centered. Also, it represents the policy maker's views. In top-down perspective, the crucial issue is the policy maker capacity to display control over the implementers and environment (Younis and Davidson, 1990). Similarly, this perspective operates with the assumption that the policy goals could be outlined by the policy makers and that setting up of predefined mechanisms would bring about the successful implementation (Goggin et al., 1990b).
2. **The Bottom-up Perspective:** In this perspective, a problem in the society serves as the starting point. To explain the perspective, Lipsky (1980) propounds a theory of "Street-level bureaucracy". The street-level bureaucrats are believed to possess a better understanding of what client needs are since it is they who have direct contact with the public. Lypsky's theory has as its hub, the fact that street-level bureaucrats are critical actors in implementing public policies.

(c) Third generation implementation theory

While the first and the second generation implementation inform about what implementation is, how and why it varies as it does, the third generation research expresses the integration of the macro world of policy makers with the micro world of individual implementers (McLaughlin, 1987). The first two generations lack the flavour of differentiating between the types of implementation outcomes and the relative importance and peculiar effects of the individual independent variables in any multivariate analysis of implementation performance (Lester et al., 1995; Winter, 2003). In order to address those identified limitations impeding the development of implementation theory, Goggin (1986) suggested a third generation implementation research in which he proposed such studies that would test theories on the basis of more comparative case studies and statistics-based research designs which could enlarge the number of observations. This brought about the distinctive attributes of the third generation implementation research design (Goggin *et. al*, 1990):

(i) An explicit theoretical model;
(ii) Operational definition of concepts;

(iii) An exhaustive search for reliable indicators of implementation and predictor variables;
(iv) The specification of theoretically derived hypothesis, with analysis of data using appropriate quantitative and statistical procedures as well as case studies for testing them.

2.2 Guidelines for productive policy implementation

A number of factors that can influence policy have been identified by policy analysts like Bardach (1977), Elmore (1978), Sabatier and Mazmanian (1980) and Barton (1997). Due to variety of views, emphases could vary. However, certain drivers of policy implementation have been consistently identified by the authors, among others, as follows:

(i) The objectives are consistent and void of ambiguities
(ii) The underpinning principles are understood and implementation officials have professional authority over the subject of the policy (what the policy is about).
(iii) Financial provisions are timely and adequate.
(iv) There is enabling law or proper legal framework.
(v) Proactive leadership commitment.
(vi) Strong skills of the implementing stakeholders.
(vii) Agreement among the relevant key actors.
(viii) Adequate rewards system.
(ix) Inclusion of non-stakeholders.

3.0 Methodology

Three sets of respondents were involved in the survey; these were Nigerian Space Policy (NSP) coordinating bodies (represented by Federal Ministry of Science and Technology (FMST) and National Space Research and Development (NASRDA)), NASRDA Activity Centres (NACs), and the multifarious stakeholders which cut across relevant private sectors, tertiary institutions and public sectors in the areas of Agriculture, Forestry, National planning, Water resources, Environmental and Emergency management. Basically, NACs and the multifarious stakeholders represented the NSP implementation bodies. Multistage sampling technique was adopted in selecting about 214 top and middle level managers from the selected organizations and questionnaires were administered to collect data from the respondents. A retrieval rate of 74.8% was achieved (160 units of questionnaire were retrieved). Data collected were analysed using descriptive statistics (frequency, percentage and calculated mean) and relational statistics (Kendall's Tau rank correlation).

4.0 Results and Discussions

4.1 Level of NSP Implementation in the Organizations

About 50% of the response from the coordinating bodies indicated that NSP had been averagely implemented so far while 27% indicated that few parts were implemented. The mean response expressed that the policy had been averagely implemented (Table 1).
"Averagely implemented" was the leading response among the NAC respondents on the state of the policy implementation (PI) with respect to their organizational mandates. A collection

of 36.3% opined for "few parts" or "poorly implemented". Among the multifarious stakeholders, the leading response on the state of PI was "averagely implemented", while 32.5% and 21.1% responses expressed few parts implemented and poorly implemented respectively. On a Likert rating scale of maximum 5, the average level of NSP implementation by the NSP coordinating bodies, NASRDA centres and multifarious stakeholders were 2.60, 2.82 and 2.27 respectively.

Table 1: Level of the NSP implementation by organizational mandate

Level of NSP implementation	Frequency		
	NSP Coordinating Bodies	NASRDA Centres	Multifarious stakeholders
Poorly Implemented	2 (13.3%)	1(4.5%)	26 (21.1%)
Few Parts Implemented	4 (26.7%)	7 (31.8%)	40 (32.5%)
Averagely Implemented	7 (46.7%)	9 (40.9%)	55 (44.7%)
Many Parts Implemented	2 (13.3%)	5 (22.7%)	2 (1.6%)
Totally Implemented	_	_	_
Mean rating	**2.60**	**2.82**	**2.27**

Source: Field survey, 2019.

Likert rating key:
1 - Poorly Implemented
2 - Few Parts Implemented
3 - Averagely Implemented
4 - Many Parts Implemented
5 - Totally Implemented

4.2 Factors Affecting NSP Implementation

A number of factors have been identified in the literature that could affect the implementation of a policy. Some could be general while some are peculiar to specific type(s) of policy. The factors considered for evaluation in this study were eighteen in number and they cut across content and clarity of the policy objectives, potential benefit of SST, leadership commitment, resources provision, legal and institutional framework and political will (Barton, 1997; Iyanda and Bello, 2016). The views of the respondents, about the level of influence by each factor, were taken on 5-point Likert scale. Afterward Kendall's Tau rank correlation was used examine the statistical relationship between each factor and the extent or level of policy implementation in the organizations.

4.2.1 Factors influencing the NSP implementation among the coordinating bodies and NASRDA centres

The coordinating bodies (CB) and NASRDA activity centres (NACs) were examined together in respect to this subject due to the fact that the centres are more administratively

related to NASRDA than other stakeholders. The results showed that almost all the issues raised as potential factors in Table 2 are indicated to be influencing the NSP implementation by the Coordinating bodies and NACs. This was established by the analysis results in which the first and second highest responses were mostly that the factors were of high influence or exceptional influence on the implementation. Therefore government political will and policy awareness (high influence, 47% each), leadership commitment (exceptional influence, 42%), involvement of the public and private stakeholders (high influence, about 40% and 34% respectively), funding (exceptional influence, 50%) and government support for the development of indigenous competences (Exceptional influence, about 37%) among others were said to be factors that have influenced NSP implementation considerably among the coordinating bodies and NASRDA activity centres. The pattern was somewhat different for feedback monitoring: the modal response was "moderate influence" (36.8%) followed by "high influence" (26.3%). All the calculated means summarily tended toward "high influence". The minimum and maximum mean values were 3.45 and 4.05 respectively.

4.2.2 Relationship between Level of NSP implementation and the Factors influencing the implementation among CB and NACs

Ranked correlation test was carried out to check for the nature and strength of the relationship between the factors and the state of policy implementation in the organizations. By the responses of the coordinating bodies and NACs, the results showed statistically significant relationship between the level of NSP implementation and three of the factors which include: Awareness of the Policy ($T = 0.465$, $p < 0.01$), Interaction/Collaboration among the stakeholders ($T = 0.395$, $p < 0.01$) and Operations of the NASRDA centres ($T = 0.346$, $p < 0.05$) (Table 4.3). It could also be deduced from the table that the correlation tests among the factors revealed a lot of positive statistically significant correlations among them. However job creation (xv) had only few instances of statistically significant relationships with other factors.

Some of the interactions among the stakeholders include joint project design and execution and collaboration of some universities and the related NASRDA Activity Centres on research and development. (Jesuleye et al., 2020). The authors observed that such collaborations were more active among the public organizations. Similarly, Secure World Foundation (2020) reported that interactions among the stakeholders are part of the major drivers of the space policy implementation in the United States of America (USA). That could be further explained by the significant involvements of the private sector in space technology investment coupled with public-private collaborations in the USA. However most of the American Government administrations, unlike Nigeria's case, put forth some favourable policies that aid the operations of the private sectors, public-private partnership (e.g. space tourism) and a regulated environment advantageous for investing in space technologies.

4.2.3 Factors influencing NSP implementation among the Multifarious Stakeholders

The results showed that almost all the issues raised as potential factors in Table 4 were found to be factors substantially influencing NSP implementation in the tertiary institutions, Federal and State Ministries, parastatals and research institutions. This was established by the results in which the highest and second highest responses were "high influence" or "exceptional influence". Therefore Government political will (high influence, 40.9%), policy awareness (high influence, 51%), leadership commitment (exceptional influence, 33%), involvement of the public and private stakeholders (high influence, 43.7% and 39.2% respectively), funding (exceptional influence, 48%), foreign assistance (High influence, 46%) and some others could be said to be the factors that have considerably influenced NSP implementation in the operations of the Multifarious stakeholders. The pattern was kind of different for the Implementation strategies and Practical benefits of SST; their first and second highest responses were "high influence" and "moderate influence" respectively.

Table 2: Factors influencing NSP implementation among coordinating bodies : NASRDA centres

Potential Factors	Response by Rating					Mean Rating
	N	L	M	H	E	
i. Political will of the Government	3 (7.9%)	_	4 (10.5%)	18 (47.4%)	13 (34.2%)	4.00
ii. Awareness of the Policy among the stakeholders	_	3 (7.9%)	8 (21.1%)	18 (47.4%)	9 (23.7%)	3.87
iii. Content/focus of the policy objectives	1 (2.6%)	4 (10.5%)	7 (18.4%)	18 (47.4%)	8 (21.1%)	3.74
iv. Content of the implementation strategies	_	5 (13.2%)	8 (21.1%)	14 (36.8%)	11 (28.9%)	3.82
v. Leadership commitment	2 (5.3%)	4 (10.5%)	7 (18.4%)	9 (23.7%)	16 (42.1%)	3.87
vi. Involvement /Commitment of the private sectors	3 (7.9%)	6 (15.8%)	8 (21.1%)	13 (34.2%)	8 (21.1%)	3.45
vii. Involvement of public stakeholders/organizations (e.g. Ministries, parastatals etc.)	1 (2.6%)	5 (13.2%)	9 (23.7%)	15 (39.5%)	8 (21.1%)	3.63
viii. Interaction/Collaboration among the stakeholders	1 (2.7%)	4 (10.8%)	9 (24.3%)	14 (37.8%)	9 (24.3%)	3.70
ix. Operations of the NASRDA research Centres	1 (2.6%)	1 (2.6%)	11 (28.9%)	8 (21.1%)	17 (44.7%)	4.03
x. Funding	3 (7.9%)	6 (15.8%)	5 (13.2%)	5 (13.2%)	19 (50.0%)	3.82
xi. Access to international /foreign collaborations and	1 (2.6%)	2 (5.3%)	6 (15.8%)	16 (42.1%)	13 (34.2%)	4.00

	assistance						
xii.	Training and retraining of personnel	3 (7.9%)	4 (10.5%)	7 (18.4%)	11 (28.9%)	13 (34.2%)	3.71
xiii.	Government support for the development of indigenous competences	-	2 (5.3%)	8 (21.1%)	14 (36.8%)	14 (36.8%)	4.05
xiv.	Job creation	_	2 (5.3%)	13 (34.2%)	15 (39.5%)	8 (21.1%)	3.76
xv.	Practical benefits and potentials of SST	_	4 (10.8%)	11 (29.7%)	10 (27.0%)	12 (32.4%)	3.81
xvi.	Availability of the necessary infrastructure and facilities	2 (5.3%)	7 (18.4%)	5 (13.2%)	10 (26.3%)	14 (36.8%)	3.71
xvii.	Feedback/progress monitoring	3 (7.9%)	2 (5.3%)	14 (36.8%)	10 (26.3%)	9 (23.7%)	3.53
xviii.	Legal and institutional framework	2 (5.3%)	3 (7.9%)	11 (28.9%)	10 (26.3%)	12 (31.6%)	3.71
Source: Field survey, 2019							
Key: N – No Influence (1); L – Low Influence (2); M – Moderate Influence (3); H – High Influence (4), E – Exceptional Influence (5).							

Table 3: Relationship of implementation factors and level of NSP implementation in coordinating bodies and NASRDA centres

	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.	xi.	xii.	xiii.	xiv.	xv.	xvi.	xvii.	xviii.	xix.
i. Policy Implementation level	1.000																		
ii. Political will of the Government	0.210	1.000																	
iii. Awareness of the Policy among the stakeholders	0.465**	0.417**	1.000																
iv. Content/focus of the policy objectives	0.163	0.437**	0.538**	1.000															
v. Content of the implementation strategies	0.110	0.296*	0.471**	0.712**	1.000														
vi. Leadership commitment	0.270	0.459**	0.567**	0.337*	.499**	1.000													
vii. Involvement of the private sectors	0.059	0.382**	0.306*	0.036	0.191	0.574**	1.000												
viii. Involvement of public stakeholders (e.g. Ministries)	0.112	0.471**	0.475**	0.202	0.401**	.683**	0.679**	1.000											
ix. Interaction/Collaboration among the stakeholders	0.395**	0.563**	0.390**	0.169	0.302*	0.620**	0.483**	0.593**	1.000										

	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.	xi.	xii.	xiii.	xiv.	xv.	xvi.	xvii.	xviii.	xix.
x. Operations of the NASRDA Centres	0.346*	0.277	0.445**	0.368**	0.333*	0.365**	0.048	0.371**	0.325*	1.000									
xi. Funding	0.132	0.546**	0.237	0.229	0.338*	0.533**	0.571**	0.570**	0.416**	0.135	1.000								
xii. Access to international collaborations and assistance	0.243	0.361*	0.362*	0.232	0.226	0.590**	0.383**	0.472**	0.500**	0.380**	0.260	1.000							
xiii. Training and retraining of personnel	-0.018	0.442**	0.206	0.348*	0.327*	0.389**	0.326*	0.406**	0.234	0.172	0.612**	0.181	1.000						
xiv. Government support for the development of indigenous competence	0.013	0.222	0.392**	0.369**	0.483**	0.503**	0.280*	0.508**	0.303*	0.197	0.333*	0.477**	0.392**	1.000					
xv. Job creation	0.017	0.061	0.242	0.300*	0.230	0.133	-0.154	0.160	0.064	0.455**	-0.079	0.231	0.278*	0.350*	1.000				
xvi. Practical benefits and potentials of SST	0.106	0.348*	0.360*	0.409**	0.374**	0.484**	0.243	0.488**	0.385**	0.483**	0.250	0.493**	0.316*	0.549**	0.451**	1.000			
xvii. Availability of the necessary infrastructure and facilities	0.190	0.657**	0.325*	0.325*	0.362**	0.632**	0.540**	0.555**	0.514**	0.081	0.768**	0.317*	0.579**	0.396**	-0.041	0.350*	1.000		
xviii. Feedback monitoring	0.139	0.480**	0.258	0.266	0.216	0.488**	0.458**	0.500**	0.339*	0.046	0.566**	0.443**	0.530**	0.436**	0.157	0.395**	0.721**	1.000	

	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.	xi.	xii.	xiii.	xiv.	xv.	xvi.	xvii.	xviii.	xix.
xix. Legal and institutional framework	0.264	0.270	0.455**	0.345*	0.445**	0.500**	0.269*	0.530**	0.422**	0.441**	0.296*	0.519**	0.306*	0.449**	0.450**	0.571**	0.315*	0.477**	1.000

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed)

4.2.4 Relationship between level of NSP implementation and the factors influencing the implementation among multifarious stakeholders

Ranked correlation test was carried out to check for the nature and strength of the relationship between the factors and the state of the policy implementation in the organizations. By the responses of the multifarious stakeholders, the results showed no statistically significant relationship between the state of NSP implementation and the factors except Government support for the development of indigenous competences ($T = 0.175$, $p < 0.05$), Table 5. It could also be deduced from the table that the correlation tests among the factors revealed a lot of statistically significant relationships.

Government support for the development of the indigenous competences being a tangible factor for space policy implementation could also be observed in South Africa, Canada, Japan, Germany and the United Kingdom. The government of Germany, with huge commitment, promotes the continuous development of technological expertise in the country. Space programmes and policy form a major thrust in the high-tech vision of the Federal Government of Germany (Federal Ministry of Economics and Technology, 2010 and Orlovska and Solodova, 2019). This attitude reflects in the nation's leading position in space technology a head some other space-faring nations for so many years. In the same vein, Ghadaki (2010) submitted that a higher level of national sufficiency and favourable stand on the international platform is one of the principles of executing the space programmes in South Africa. In Japan, increasing application of Space technologies in the civil service, and empowering of the public and private sectors in the area of space science and technology by the government were reported by Nagai et al. (2015).

Table 4: Factors affecting NSP Implementation among Multifarious Stakeholders

Factors	Response by Rating					Mean Rating
	N	L	M	H	E	
i. Political will of the Government	4 (3.1%)	6 (4.7%)	22 (17.3%)	52 (40.9%)	43 (33.9%)	3.98
ii. Awareness of the Policy among the stakeholders	5 (4%)	8 (6.4%)	23 (18.4%)	64 (51.2%)	25 (20%)	3.77
iii. Content/focus of the policy objectives	4 (3.2%)	13 (10.5%)	29 (23.4%)	63 (50.8%)	15 (12.1%)	3.58
iv. Content of the implementation strategies	4 (3.2%)	14 (11.3%)	30 (24.2%)	63 (50.8%)	13 (10.5%)	3.54
v. Leadership commitment	8 (6.6%)	10 (8.2%)	23 (19%)	40 (33.1%)	40 (33.1%)	3.78
vi. Involvement /Commitment of the private sectors	4 (3.3%)	18 (15%)	24 (20%)	47 (39.2%)	27 (22.5%)	3.63
vii. Involvement of public stakeholders/organizations (e.g. Ministries)	3 (2.4%)	17 (13.5%)	25 (19.8%)	55 (43.7%)	26 (20.6%)	3.67
viii. Interaction/Collaboration among the stakeholders	2 (1.6%)	11 (8.9%)	26 (21%)	50 (39.4%)	35 (28.2%)	3.85
ix. Operations of the NASRDA research Centres	2 (1.6%)	10 (8.1%)	21 (17.1%)	55 (44.7%)	35 (28.5%)	3.90
x. Funding	2 (1.6%)	5 (4.1%)	19 (15.4%)	38 (30.9%)	59 (48%)	4.20
xi. Access to international collaborations and assistance	3 (2.4%)	5 (4.1%)	21 (17.1%)	57 (46.3%)	37 (30.1%)	3.98
xii. Training and retraining of personnel	2 (1.6%)	5 (4%)	17 (13.6%)	52 (41.6%)	49 (39.2%)	4.10
xiii. Government support for the development of indigenous competences	3 (2.4%)	11 (8.8%)	24 (19.2%)	46 (36.8%)	41 (32.8%)	3.89
xiv. Job creation	4 (3.3%)	12 (9.7%)	27 (22%)	50 (40.6%)	30 (24.4%)	3.73
xv. Practical benefits and potentials of SST	7 (5.9%)	6 (5%)	31 (26.1%)	48 (40.3%)	27 (22.7%)	3.69
xvi. Availability of the necessary infrastructure and facilities	6 (4.8%)	8 (6.5%)	22 (17.7%)	53 (42.7%)	35 (28.2%)	3.79
xvii. Feedback monitoring platforms	5 (4%)	11 (8.8%)	22 (17.6%)	57 (45.6%)	30 (24%)	3.77
xviii. Legal and institutional framework	5 (4.1%)	9 (7.3%)	26 (21.1%)	57 (46.3%)	26 (21.1%)	3.73

Source: Field survey, 2019
Key: N = No Influence (1); L = Low Influence (2); M = Moderate Influence (3);
H= High Influence (4); E = Exceptional Influence (5).

Table 5: Relationship of Implementation Factors and Level of NSP Implementation in the Multifarious Organizations

	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.	xi.	xii.	xiii.	xiv.	xv.	xvi.	xvii.	xviii.	xix.
i. Policy Implementation level	1.000																		
ii. Political will of the Government	0.076	1.000																	
iii. Awareness of the Policy among the stakeholders	0.095	0.509**	1.000																
iv. Content/focus of the policy objectives	0.001	0.254**	0.527**	1.000															
v. Content of the implementation strategies	-.046	0.322**	0.512**	0.670**	1.000														
vi. Leadership commitment	0.099	0.500**	0.489**	0.366**	0.426**	1.000													
vii. Involvement of the private sectors	0.027	0.349**	0.421**	0.327**	0.359**	0.467**	1.000												
viii. Involvement of public stakeholders (e.g. Ministries)	0.043	0.344**	0.475**	0.375**	0.444**	0.428**	0.578**	1.000											
ix. Interaction/Collaboration among the stakeholders	0.023	0.444**	0.512**	0.399**	0.466**	0.531**	0.533**	0.647**	1.000										
x. Operations of the NASRDA Centres	0.090	0.311**	0.383**	0.258**	0.264**	0.341**	0.325**	0.465**	0.550**	1.000									
xi. Funding	0.143	0.469**	0.313**	0.18[illegible]*		0.435**	0.380**	0.301**	0.404**	0.514**	1.000								
xii. Access to international collaborations and assistance	0.083	0.327**	0.322**	0.327**	0.250**	0.257**	.361**	0.368**	0.430**	0.553**	0.550**	1.000							
xiii. Training and retraining of personnel	0.111	0.347**	0.243**	0.170*	0.149	0.381**	0.369**	0.343**	0.409**	0.498**	0.595**	0.645**	1.000						

	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.	xi.	xii.	xiii.	xiv.	xv.	xvi.	xvii.	xviii.	xix.
xiv. Government support for the development of indigenous competence	0.175*	0.466**	0.294**	0.150	0.237**	0.360**	0.330**	0.282**	0.396**	0.498**	0.536**	0.557**	.612**	1.000					
xv. Job creation	0.123	0.227**	0.380**	0.401**	0.373**	0.286**	0.409**	0.399**	0.405**	0.365**	0.360**	0.450**	.385**	0.509**	1.000				
xvi. Practical benefits and potentials of SST	0.083	0.307**	0.321**	0.417**	0.364**	0.338**	0.391**	0.391**	0.433**	0.446**	0.453**	0.375**	.361**	0.380**	0.546**	1.000			
xvii. Availability of the necessary infrastructure and facilities	0.081	0.475**	0.438**	0.264**	0.285**	0.439**	0.520**	0.430**	0.495**	0.442**	0.555**	0.568**	.540**	0.577**	0.520**	0.439**	1.000		
xviii. Feedback monitoring	0.092	0.450**	0.410**	0.249**	0.287**	0.474**	0.309**	0.273**	0.399**	0.348**	0.496**	0.440**	.501**	0.533**	0.361**	0.397**	0.663**	1.000	
xix. Legal and institutional framework	0.096	0.352**	0.441**	0.313**	0.352**	0.358**	0.330**	0.414**	0.458**	0.529**	0.383**	0.486**	.370**	0.487**	0.476**	0.486**	0.569**	0.577**	1.000

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed)

5.0 Conclusion

The level of NSP implementation was found by the study to be on the average. Awareness of the Policy among the stakeholders, interaction/collaboration among the stakeholders, the operations of the NASRDA activities centres were found to have statistically significant relationships with the level of policy implementation in the operations of the NSP coordinating bodies and the NASRDA activity Centres. Government support for the development of indigenous competences was found to have statistically significant relationship with the policy implementation level in the operations of the multifarious stakeholders. Improvement on the identified factors could invariably favour the level of the NSP implementation. Efforts should, however, be expedited on the improvement in order to avert the deterioration tendency of the situation.

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