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DAFTAR ISI

<p><u>Capacity of Solid Waste Management of the Municipalities in North-West Region of Bangladesh: A Far Cry with Sustainable Development</u></p> <p>DOI : 10.15575/ks.v3i1.10419</p> <p><i>A K M Mahmudul Haque, S M Akram Ullah, Md. Asfaq Salehin</i></p>	<p>PDF</p> <p>1-14</p>
<p><u>Relationship between Human Capital Investment and Employees' Work Efficiency in ATAP Bauchi: The Relevance of TETFund Interventions</u></p> <p>DOI : 10.15575/ks.v3i1.10417</p> <p><i>Hashim Sabo Bello</i></p>	<p>PDF</p> <p>15-21</p>
<p><u>Social Development Through International Relations</u></p> <p>DOI : 10.15575/ks.v3i1.10711</p> <p><i>Gulab Mir Rahmany</i></p>	<p>PDF</p> <p>22-32</p>
<p><u>Establishing the Nexus between Climate Change, Force Migration and Food Production/Security in Nigeria: Research Observations of Historian and Agriculturist</u></p> <p>DOI : 10.15575/ks.v3i1.10487</p> <p><i>Emmanuel Osewe AKUBOR, Beatrice Amili AKUBOR</i></p>	<p>PDF</p> <p>33-44</p>
<p><u>Selected Rights for Persons with Disabilities to Become Presidents Associated with Legal and Spiritual Ability Conditions in Indonesia</u></p> <p>DOI : 10.15575/ks.v3i1.11356</p> <p><i>Yoga Maulana Ibrahim</i></p>	<p>PDF</p> <p>45-53</p>

CAPACITY OF SOLID WASTE MANAGEMENT OF THE MUNICIPALITIES IN NORTH-WEST REGION OF BANGLADESH: A FAR CRY WITH SUSTAINABLE DEVELOPMENT

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Abstract

The study addresses the overall waste management and drainage system of the Municipalities of Bangladesh. It also endeavors to compare the existing system with the requirements of making a sustainable city following the targets of Sustainable Development Goals (SDG). It tries to highlight the shortcomings of the existing system of waste management and argues that this is never able to confine sustainability in the environment and the habitats of the Municipalities. The study use a qualitative approach and empirical in nature mainly based on primary data. Data have been collected from the officials and stakeholders of the three selected Municipalities of a North-west district of Bangladesh- Rajshahi through face to face interview and Focus Group Discussion. This paper identifies the fragile solid waste management capacity of the Municipalities of Bangladesh and argues that current practice is nothing but an inevitable setback for the country to achieve sustainable development.

Keywords: Capacity, Municipality, Solid Waste Management, Sustainable Development, 3Rs

Abstrak

Studi ini membahas pengelolaan limbah secara keseluruhan dan sistem drainase di Kota Bangladesh. Selain itu juga berupaya membandingkan sistem yang ada dengan persyaratan mewujudkan kota yang berkelanjutan sesuai target Pembangunan Berkelanjutan. Penelitian ini mencoba menyoroti kekurangan dari sistem pengelolaan sampah yang ada dan berpendapat bahwa sistem ini tidak pernah dapat mengatasi masalah pengelolaan sampah berkelanjutan di lingkungan dan habitat kota. Penelitian ini menggunakan pendekatan kualitatif dan bersifat empiris terutama berdasarkan data primer. Data telah dikumpulkan dari para pejabat dan pemangku kepentingan dari tiga Kota terpilih di distrik barat laut Bangladesh-Rajshahi melalui wawancara tatap muka dan Diskusi Kelompok Terfokus. Makalah ini mengidentifikasi kapasitas pengelolaan limbah padat yang rapuh di Kotamadya Bangladesh dan menguatkan pendapat awal bahwa praktik saat ini tidak lain adalah kemunduran yang tak terelakkan bagi negara untuk mencapai pembangunan berkelanjutan.

Kata Kunci: Kapasitas, Kota, Pengelolaan Sampah, Pembangunan Berkelanjutan, 3Rs.

INTRODUCTION

Solid waste management (SWM) has been an integral part of the human society (Desa et al., 2012). Therefore, a solid waste management approach which is compatible to the nature and society is unavoidable affair for any city in this planet (Das et al., 2019). Bangladesh and its emerging towns are no exception to this. In fact, due to the gradual growth of developing nations, the rate of urbanization has reached to a certain point that it is mandatory to design and initiate a solid waste management system. Here in order to keep up the pace with the global trend and to concentrate on the sustainable development, an integrated and sustainable solid waste management system is essential incorporating 3Rs (reduce, reuse and recycle) technologies (Wilson et al., 2015). However, economic capability and other certain

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aspects e.g. society, culture and politics are the setbacks for countries like Bangladesh and its' towns. However, countries with greater economy like Japan and South Korea have already shown the courage of undertaking enormous projects incorporating 3Rs technologies which are highly focused on "Zero Waste" and/or "Zero Land filling" (Shekdar, 2009). According to Ahsan et al., the rate of generated waste in various cities of Bangladesh is varying within the range of 0.2 to 0.56 kg/cap/day, meanwhile the optimum rate is 0.56 kg/cap/day in Dhaka and the minimum waste generation rate is 0.2 kg/cap/day in Barisal as Table 1 (Ahsan et al., 2014). The waste generation of Municipalities or in municipal areas is anticipated to a rise of 0.6 kg/cap/day by 2025 (Islam, 2018). The waste generation rate has increased from 1.1 million tons in 1970 to 5.2 million tons in 2015 as shown in figure 1. The trend of waste generation per year is growing at a rate of 0.1343 million tons per year (368 t per day). About 78% of solid waste is generated from housing sector and 20% from business sector, 1% from the institutional sector and the rest from other sectors (Ahsan et al., 2014). Existing capacity for waste management in Bangladesh varies among city corporations and municipalities, and the government authorities need immediate attention to this regard (Ray, 2008). A crucial role in improving conservancy services is taken up by community-based, private and non-government organizations as the city governments have failed to deliver the vital services (Ray, 2008).

Table 1. Total Amount of Urban Waste in Bangladesh

City/town	Waste generation rate (kg per capita/day)	No. of city	Population in 2013	Total waste generation (tones/day)		Average waste generation (tones/day)	Average waste generation (tones/year)
				Dry season	Wet season (46% increase from dry season)		
Dhaka	0.56	1	72,27,891	4,047.62	5,909.52	4,978.57	18,17,179
Chittagong	0.48	1	26,56,472	1,275.11	1,568.38	1,568.38	5,72,459
Khulna	0.27	1	6,73,093	181.74	265.33	223.53	81,590
Rajshahi	0.44	1	4,56,277	200.76	293.11	246.94	90,132
Barishal	0.25	1	3,45,972	86.49	126.28	106.39	38,831
Sylhet	0.3	1	5,09,107	152.73	222.99	187.86	68,569
Municipalities	0.25	308	1,93,63,662	4,840.92	7,067.74	5,954.33	21,73,329
Other Urban Centers	0.15	208	57,54,294	863.14	1,260.19	1,061.67	3,87,509
Total		522	36,98,67,68	11,584.63	16,913.56	14,249.09	52,00,919

Source: Ahsan et al (2014)

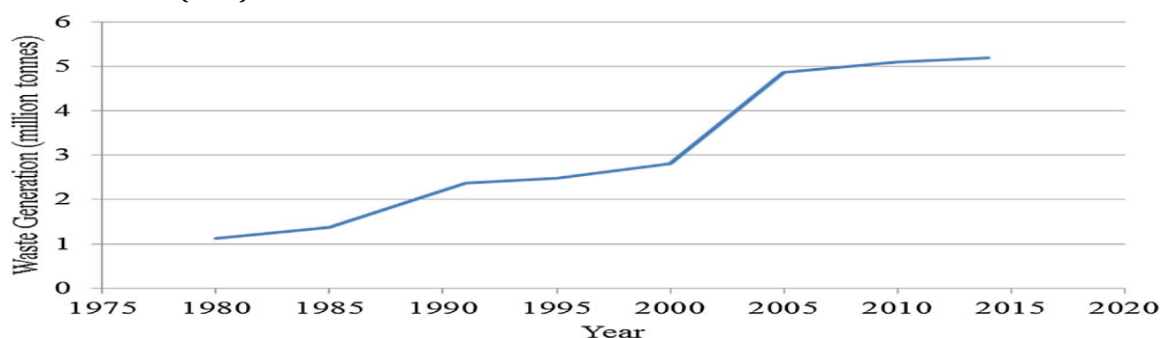


Figure 1. Trends of waste generated annually in Bangladesh.

Source: Adopted from Ahsan et al (2014)

In this circumstance, the 330 Municipalities of Bangladesh are confronting the challenge of taking care of the daily produced waste with a very poorly equipped system. As a consequence, the existing waste management system of Bangladesh totally mismatches the required system which is compatible with Sustainable Development Goals. Several previous studies such as research Alam & Qiao (2020), Ashikuzzaman & Howlader (2020) and Dey et al (2020) however, research on sustainable waste management systems is lacking. This paper assessed the waste management system of three town governing agencies and compared it to the system that is required to be sustainable solid waste management system.

RESEARCH METHOD

This paper is constructed on both qualitative and quantitative data. Quantitative data have been gathered mostly from secondary sources namely, online materials, newspaper features, articles, books and other relevant supplements (Brannen, 2017). For primary data, mostly three municipalities of Rajshahi district named Katakali, Naohata and Puthia have been chosen. Nine officials from three municipalities (three from each) have been interviewed along with the 300 local residents (100 from each municipality). In order to collect data, questionnaire survey was applied as a tool where two sets of questionnaire were developed, one for the municipality officials and another for the local residents.

Three FGDs have also been conducted in three selected municipalities. Each FGD was conducted inviting eight members from each municipality considering their knowledge and expertise in local solid waste management issues. FGD members were chosen from different professions such as, local influential persons, locally renowned business men, teachers, public representatives, etc (Mishra, 2016). A check list was made incorporating four agenda of solid waste management which were set by congesting the homogenous questions from the questionnaire. The FGD was moderated and opinions were recorded by two separated individuals. Each of the members was well participatory and cooperative and their statements were found highly efficient by which cross check with the findings of the field survey has been done in order to understand their final opinion.

RESULTS AND DISCUSSION

CONCEPT OF SOLID WASTE MANAGEMENT

The word 'waste' refers to useless, unwanted or discarded materials, which are no longer considered of sufficient value and are thrown away by the possessor. Waste means any solid, liquid, gaseous, radioactive substance, the discharge, disposal and dumping of things which may cause harmful change to the environment (Hossain et al., 2011). On the other hand, solid waste is the pile of dirt and filth. It is the resultant of the utilization of products by the consumers. Solid wastes comprise of all solid refuses or trashes resulting from the normal activities of the community except excreta (Gautam & Agrawal, 2021; Sutrisno, 2017). In Agenda 21 of Rio Earth Summit in 1992, solid waste has been defined as all domestic and non-hazardous wastes, such as, commercial and institutional waste, street sweeping and constructional debris (Joseph, 2014). Municipal solid wastes are generally viewed as a municipal responsibility, includes: household garbage and rubbish, residential ashes, commercial refuse, institutional refuse, street sweepings, construction and demolition debris, dead animals, sanitation residue, industrial, clinical and hospitals wastes. Household waste is mainly composed of food, grass and plants, brick, dirt, paper and polythene, shredded skin, leather etc.

Solid waste management refers to the management of solid garbage. Management is a process of planning, organizing, directing, controlling, and coordinating for attaining a common goal. On the other hand, solid waste management is a methodology of minimization of wastes, primarily through reduction at source, but also including recycling and re-use of materials and final disposal. It is the systemic administration of activities for the collection, source separation, storage, transportation, transfer, processing, treatment and disposal of solid wastes (Tai et al., 2011). It is a process of handling wastes (collection and transportation) through minimum cost targeting reduction at source, re-use and recycling and final disposal with least pollution for achieving a sustainable environmental development.

Sustainable management of solid waste addresses public health, environmental pollution, land use, resource management and socio-economic impacts associated with improper disposal of waste (Marshall & Farahbakhsh, 2013). Sustainable waste management reduces the amount of natural resources consumed, confirms that any materials that are taken from nature are reused as many times as possible and that the waste created is kept to a minimum.

Sustainable solid waste management is a more efficient and environment friendly way that deals with the wastes generated daily. Although, the concept varies from country to country, there are a few core components. Firstly, sustainable waste management system is effective to reduce the generation of wastes gradually. Secondly, generated wastes must be separated before dumping. This separation should be done twice; firstly in the household, then by the municipality before dumping. Different types of strategy are applied to treat the wastes. Following this method, 3Rs (Reduce, Reuse and Recycle) technique should be applied. In addition, a sustainable waste management must incorporate sophisticated treatment plant, policies, and laws for waste management (Shekdar, 2009). Sustainable solid waste management can be conceptualized in the figure 2.

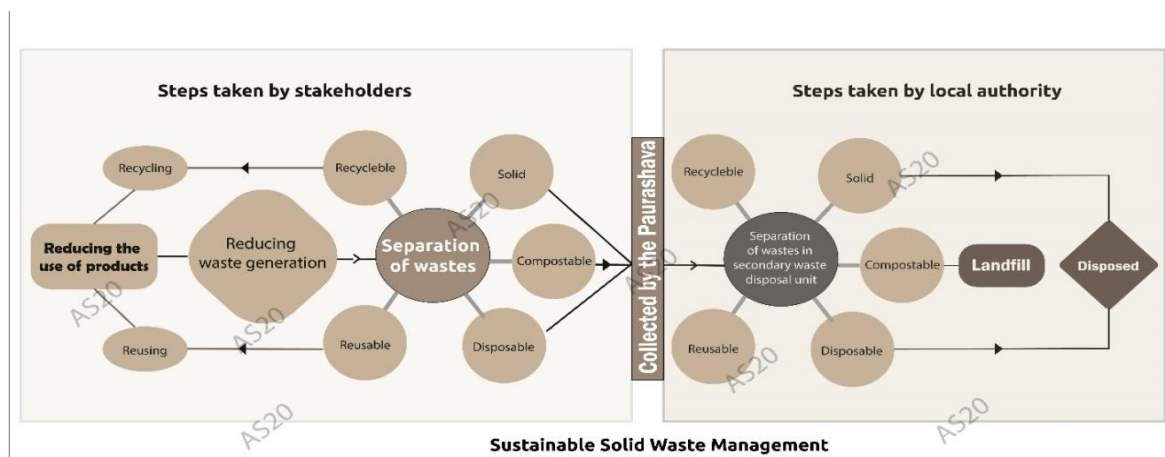


Figure 2. Sustainable Solid Waste Management
Source: Developed by the researchers (2020)

Results

Regarding waste management practices, chief officials of all the selected Municipalities were asked several questions. Table 2, Table 3 and Table 4 have been arranged on the basis of information given by the concerned officials of Katakhal, Puthia and Naohata Municipality.

The study reveals that Katakhalī Municipality does not have any dumping station to dump its wastes. In this case, its responsible workers throw away their collected wastes in the river Padma which is 4km away from the city. The way taken by Katakhalī Municipality to dump collected wastes in the Padma does not bring any positive impact in the city area and in the environment rather it threatens the environment seriously. One of the researchers asked a question to the local body about their particular plans for the future. In response of this question, the local body responded positively and said that Katakhalī Municipality has been selected for a project named 'Water and Sanitation Program' funded by the World Bank. This international financial organization has selected 30 Municipalities across the country under the project of 'Water and Sanitation Program.' In the words of Secretary of Katakhalī Paurashava,

“Currently, there is no other options in our hand. We are waiting. We have already selected a land for making a garbage pit, we are also hoping that, we will install a well-equipped garbage management system with all the modern technologies. There will also be a treatment plant and a disposal unit as well. We have been being optimistic since getting a roll of entries by the World Bank for this project. The World Bank will distribute 870 million BDT among 30 Municipalities across the country. Our Municipality has done well in view of its standing committee meeting, and we have reported the overall progress in black and white to the Ward Level Coordination Committee (WLCC) and Town Level Coordination Committee (TLCC). Our consistent progress has awarded us with this project (Personal Communication with Munir, A K M Mahmudul Haque, July 17 2019)”.

Therefore, solid waste management of Katakhalī Municipality to a great extent is depended on the project to be started later. In case of solid waste management, the situation and capacity of Naohata Municipality is not better than that of Katakhalī Municipality. It does not have any specific place except a land (pit) to dump its wastes inside the city. Chief Official of Naohata Municipality informs us that they sometimes throw away the solid wastes to fill some ponds or low land of local inhabitants on the basis of their consent. However, no specific area is used as a garbage pit. FGD respondents also mention that, there is no pit in their Municipality. The situation is so poor that, it is not rational to expect any treatment plant or any composting system. They consider the environmental issues so poorly that they do not find any way out for assessing environmental issues properly.

Table 2. Core Issues of Solid Waste Management

Core Issues of Waste Management	Katakhalī	Naohata	Puthia
Dumping Station	Dumps the entire wastes in the River Padma	Dumps in the land (Public Property)	By the main road
Distance of dumping station from the city	4km	Inside the town	2km
Local residence around Area	No	Yes	No
Treatment plan	N/A	0.27 Hector	0.42 Hector
Composting system	No	No	No
Environmental and Social Impact Assessment	Never	Never	Never

Source: Field Survey, 2019

Table 3 depicts the solid waste management capacity of the Katakhalī, Puthia and Naohata Municipality. In case of Katakhalī Municipality, it has two dump trucks and three paddle vans. But, the situation is totally different subject to consideration of the number of personnel. The authority of Katakhalī Municipality claims that they have twenty six field staff working in the city under 'no work no pay' basis for managing the wastes. Even, there is no specialized person to monitor or supervise the waste management procedure. But the report of FGD and observation revealed a different story. FGD members

failed to recall any sort of cleaning activities of the Municipality except in the main road and the Bazar. About instruments, they are lagging far behind and they do not think that they have enough personnel either. However, twenty six field staff for a Municipality like Katakhalī sounds fair and manageable. This Municipality also does not keep any record of the amount of daily waste generation. About infrastructural sufficiency, Katakhalī Municipality authority claims that they have about 50 dustbins across the Municipality but the FGD report and physical observation prove that the claim of Municipality authority is completely different from the real picture and the number of the dustbins that exist in the Municipality area is not same as the claimed number of the authority.

In the city area, scavengers play an important role to collect wastes and to keep the city neat and clean. The local authority may maintain contact with them (Asim et al., 2012). However, Katakhalī Municipality does not keep record of any scavengers. When the local authority was asked about the frequency of cleaning the road of the Municipality area, they gave negative answers. The report of FGD was also same in this case. According to FGD report, the Municipality only sweeps the main road and a few places of the markets. Even the market places, now and then, are cleaned by the markets' own attempt. In fact, the role of the local authority is hardly noticeable in terms of waste management.

In case of Naohata, the situation was not different. It was almost as same as Katakhalī Municipality. It also owns three paddle vans and two garbage trucks. This Municipality has a person to monitor and inspect the overall waste management process. The person who is in charge of supervising the waste management system of the area informed us. We want to provide good services for the citizen but realities do not let us do anything. Political pressure is more than what we expect necessary here. The Mayor always wants to keep his popularity on the top. Therefore, he lets his followers do anything what they want. Many initiatives of the Municipality do not see the light of the day. Most of the people don't pay any heed to our indications. On the contrary, they take a side on the part of the Mayor. Our Municipality generates huge revenue; we have a lot of services to offer the citizens. If the workers and members of this local governing body unify themselves, then the scenario will be different (Personal Communication with Mostak, Asfaq Salehin, July 19, 2019).

The information provided by the official of Katakhalī Municipality seems to be true, if findings of the FGD are found identical. According to the report, there is no waste management system in this area. No one collect the waste from the household or other local places. Most of the places of the Municipality except the roadside are still rural. Dwellers take care of their own wastes. A little amount of wastes managed by the sweepers from the market places and the main road sides is thrown away to pile here and there. Therefore, these places become dirty instead of making the city clean, the Municipality makes it even worse. One of the FGD members claimed that he had got one personnel red-handed while he was throwing the garbage in the river. The responses from the official and the findings from the city are highly depressing. The waste management system of these two local bodies is poor and indicates to very poor environmental governance as well.

Table 3 shows that the waste management system of Puthia Municipality is very much fragile. Not unlikely Katakhalī and Naohata Municipality, Puthia Municipality does not have any solid waste management system as well. In some cases, it seems more vulnerable. Especially, the capacity of Puthia is weaker than the other two. Besides this, about treatment plant, composting system, Environmental and Social Impact Assessment, Puthia Municipality has not taken any initiative as well. While asking about the overall waste management system of Puthia Municipality, one of its high officials (Engineer) informed us that,

Puthia is comparatively a small and weak Municipality. There is hardly any modern facility. The income of Puthia Municipality is too poor to build a strong fund for each sector. Our Municipality is delivering the basic services in a traditional way. In terms of introducing a system for managing the solid wastes of the town, we have not planned anything particularly. As you see, our Municipality does not even have any convenient office as well. The biggest problem is that Puthia Municipality does not have any spare land inside the town that can be used to improve the service delivery (Personal Communication with Saiful, S M Akram Ullah, July 21, 2019).

Therefore, overall waste management system of the three selected Municipalities is equally vulnerable and hardly qualified as a sustainable solid waste management system. Table 4 also indicates the vulnerability of the systems as well. It indicates that Katakhal, Puthia and Naohata uphold almost same capability in transporting waste because all of them have equal number of vehicles. On the other hand, Puthia seems weaker having a truck and a van less than the other two. In terms of manpower, Katakhal is more capable rather than Naohata and Puthia. The later two Municipalities are weaker because they do not have any specific set of personnel for this task. Further information of the table clarifies that the waste management system of three selected areas is weak. However, Katakhal has a future plan over this crisis. But the other two do not seem to have anything for the future regarding this service delivery. In response to the question about regular inspection on solid waste management activities, the respondents of Naohata Municipality, especially the member of authoritative body told that they inspect the activities positively. But the findings and responses of FGD composed of stakeholders gave us different opinion and that was completely opposite to the answers given by the member of authoritative body of Naohata Municipality.

Table 3. Solid Waste Management Capacity of the Municipalities

Waste Management Capacity	Katakhal	Naohata	Puthia
Waste Transporting Vehicles	3 Vans and 2 Dump Trucks	3 Vans and 2 Dump Trucks	2 Vans 1 Dum Trucks
Cleaning personnel	26	6	Not Specific
Cleaning personnel type	No work no pay	No work no pay	No work no pay
Authority to inspect	No	Yes	Never
Waste management plan for the future	Yes	No	No
Amount of daily waste	N/A	N/A	N/A
Workers use safety equipment	No	No	No
Sufficiency of labor and equipment to collect waste	Not sufficient at all	Not sufficient at all	Not sufficient at all
Infrastructural sufficiency (Dustbins)	Not sufficient at all	Not sufficient at all	Not sufficient at all
Sufficiency of manpower	Sufficient	Not sufficient at all	Not sufficient at all
Mosquito killing equipment e.g. Fogger machine	Functional 1, Malfunctioning 1	Functional 3	Functional 1
Regular inspection	No	No	No
Contact to the scavengers	No	No	Not any
Cleaning the road regularly	No	Occasionally	Yes
Sufficiency of vehicles for collecting waste	No	No	No

Source: Field Survey (2019)

Looking further at the waste management system of these three Municipalities, then the researchers have got discomfoting and troublesome data. All regions have ensured that, they do not have specific measures for collecting waste from different institutes like hospitals and clinics, hotels, restaurants

and households. However, one of the respondents of Katakhalī Municipality has ensured that the butchers' shop is well taken care of. The report of FGD and observation reveals that the Municipality authority has nothing to do in the sphere of collecting solid waste from the butchers' shops. It does not play any role to clean up the butchers' shops carefully. Actually, all butchers' shops are taken care of by the shops' owners. They do it only for their own interests. We all know that wastes from the hospitals might be hazardous and injurious for health. Therefore, these wastes should be shifted regularly by the Municipality authority. But nothing of that is done in Katakhalī Municipality. In this case, one of the officials from Katakhalī Municipality expressed that the clinics do not give us a satisfactory amount of taxes. Therefore, we do not provide them any special service in return. Their wastes should be managed by themselves (Personal Communication with Shamim Ashraful, A K M Mahmudul Haque, July 17, 2019).

The officials from Naohata Municipality and stakeholders were also asked about the same issue. Data collected from the field level prove that the respondents do not have much knowledge about hazardous and non-hazardous garbages. The FGDs report also ensured that no special measure is taken by the authority for managing wastes produced from hospitals and clinics, hotels, restaurants, butchers' shop, and the like. Even in this area, they do not have any step to clean the markets as well. The markets are cleaned and the wastes are managed by their own workers, not by the workers of Municipality.

In Katakhalī Municipality, twenty six workers are engaged to clean the drains on a regular basis. Though the authority claims that they clean the drains frequently, the report of FGD and field observation didn't find this statement true. In the Municipality area, there is no concrete drain inside the town. In case of Naohata Municipality, the situation is still worse in amount and quality. Although, there are a few concrete drains but all of them are built in an unplanned way. So, it turns out more like a curse than a blessing. Even there is no option of the drains to take the liquid waste to any suitable place out of the locality. All of the dirty liquid wastes are absorbed by the soil and the environment gets even more affected by the liquid waste. About this issue, the local authority said,

The Municipality has the capacity to construct an effective drainage system but the political issue is the biggest drawback in this case. The leaders who want to be more popular in this region patronize the local people in a negative way. Most of these citizens don't let the authority to use their land for or build the drains. The local authority faces such a type of problems when they want to construct dustbins. Therefore, it is possible on the part of them to ensure environmental good governance in this region to some extent but the political impediment has become a great challenge in the way of ensuring environmental good governance (Personal Communication with Mesbah, A K M Mahmudul Haque, January 19, 2020).

About the industrial wastes, the Municipalities have let us know that, the industries highly pollute the environment. But they don't take any special care for the industrial wastes. Most of the industries release their liquid waste in the central raw drain and the canal. And some of them leave a portion of the liquid in an open low land. As a result, it pollutes the environment and daily life and it invites human being to face a big difficult challenge. The local citizens are highly bothered for this action of the industries. Initiative taken in this regard was very passive and the Municipalities were not found interested to resolve this crisis.

One of the responsibilities of the Municipality is to supply health risk-reducing materials, like uniform, gumboots, masks, hand gloves, etc. for its conservancy workers. During interview and field observation, it is found that workers of every selected Municipality do not use safety materials while they are cleaning or sweeping roads, drains, tips, etc. Municipality officials said that they provide health risk-reducing materials, sufficient training and necessary treatment to their conservancy workers. But the

workers do not use these safety materials because of their limited knowledge and lack of awareness. Many workers do not participate in the training sessions, giving false excuses. The Municipality does not take any punitive measures for such workers as well.

Table 4. Managing the Solid Waste

Managing the waste	Katakhal	Naohata	Puthia
Managing the waste from the market	No specific measure	No specific measure	No specific measure
Managing the waste of butchers shop	Well managed by butchers themselves	No specific measure	No specific measure
Managing the waste of hospitals and clinics	Taken care by owner themselves	No specific measure	No specific measure
Managing the waste of hotels and restaurants	No specific measure	No specific measure	No specific measure
Cleaning the drain	Frequently	Frequently	Frequently
Mud from the drain	Left on the road to dry	Left on the road to dry	Left on the road to dry
Managing the waste from industrial	Thrown in the river	No specific measure	Landfill:2 km away from the city
Publicity campaigning	Frequently	Occasionally	Occasionally
Training for the workers	One workshop	One workshop on handling fogger machine	None
Budget allowance on SWM	Yes	Yes	No

Source: Field Survey (2019)

As a part of ensuring sustainable waste management, the Municipalities must create awareness programs on waste management issues and continue the publicity or campaigning regarding the cleanliness and garbage management. But each of Katakhal, Naohata and Puthia Municipality was found regardless in this issue. The authorities said that they have done a few time to time. But the field report and FGD proved the claims of authority false. Every respondent agreed that there is a lack of budgets and plans for this issue (Rodić & Wilson, 2017).

Mismanagement of solid waste has a great adverse impact that pollutes environment to a great extent and creates health hazard (Ferronato & Torretta, 2019; Malav et al., 2020). Data (presented below) have been collected from the respondents to extract further information regarding the solid waste management system of these three Municipalities. Data arranged in Table 5 draws a clear picture about the overall situation and problems of solid waste management of each of the Municipalities. The Table 5 has been made after a proper investigation. One of the biggest problems for which Municipalities suffer a lot in proper managing of solid waste and keeping the drainage system clean is that, throwing the wastes in the drains is a common tendency of residents of every region. On the other hand, more than half (53.66%) of the respondents also claimed that, the authorities do not remove the waste in time on account of their apathy. Local cooperation is also absent, and this is confessed by 63.33% of the total respondents. Over and above this, 84% of the total respondents think that the Municipality authorities are responsible for ruling a clean town and its solid waste management system. But it is obvious that there is a lack of responsibility of the Municipality authorities in this sphere. 41% of the total respondents traced the faulty drainage system as one of the key problems of solid waste management and they think that drains of the town are not managed properly. 42.66% identified lack of conservancy staff, 27.66% marked off lack of dustbins, 46.66% traced lack of equipments and 60.66% branded lack of budget as the key problems of sustainable solid waste management system and they are dissatisfied with these problems.

Table 5. Key Problems of Solid Waste Management

Key problems of waste management	Katakhali	Naohata	Puthia	Average (%)
Dumping waste in the drains	100%	100%	100%	100%
Apathy in removing waste in time	44%	65%	52%	53.66%
Lack of local cooperation	18%	80%	92%	63.33%
Lack of authority's responsibility	77%	81%	94%	84%
Lack of conservancy staff	28%	22%	78%	42.66%
Lack of dustbins	10%	13%	60%	27.66%
Lack of equipment	64%	53%	23%	46.66%
Faulty drainage system	18%	69%	36%	41%
Lack of budget	73%	26%	83%	60.66%

Source: Field Survey (2019)

Infrastructural supports and facilities are very essential for ensuring sustainable solid waste management. But field survey (Table 6) reveals that more than half (57.66%) of the respondents on an average from each of the three Municipalities identified infrastructural problems of local authority as the worst constraint in managing solid wastes sustainably.

Table 6. Infrastructural Problems in Managing Solid Waste

Infrastructural problems in managing solid waste	Yes	No	No Comments
Katakhali Municipality	67 (67%)	04 (04%)	29 (29%)
Naohata Municipality	36 (36%)	06 (06%)	58 (58%)
Puthia Municipality	70 (70%)	05 (05%)	25 (25%)
Average (%)	57.66%	05 (05%)	37.33%

Source: Field Survey (2019)

On the basis of data collected by the field study and arrayed in the Table 6, it can be said that 63% of the respondents believe the weak solid waste management system of their Municipality is posing a threat on the health of the local residents whereas 84.33% admit that it is more threatening to the environment as well. Only 08% of the total respondents do not consider this as an issue at all.

Discussion

A FAR CRY WITH SUSTAINABLE DEVELOPMENT

Generally Bangladesh shares almost same and homogenous characteristics in most of its regions both culturally and socially. Therefore the findings of this study might be a general picture for all the underdeveloped Municipalities of the country.

Table 7. Major Findings

	Major Findings	Katakhalī Municipality	Naohata Municipality	Puthia Municipality	Responsible Institutions
Existing solid waste management system	Vulnerability of the system	<ul style="list-style-type: none"> Insufficient equipment No secondary waste disposal units Shortage of staff No written policies No future plans (Except Katakhalī) 	Indifferent	Indifferent	Both authorities and stakeholders
	Challenges and loopholes of the system	<ul style="list-style-type: none"> Insufficient Budget Lack of awareness Lack of central government intervention Lack of stakeholders' cooperation No specific policy Municipalities' negligence Political intervention 	Indifferent	Indifferent	
	Compatibility with Sustainable Development	Not Compatible			

Source: Developed by the researchers (2020)

In this sense, the circumstance looks more threatening. The discussion of the previous section and table 7 completely sums up the vulnerability and irregularity in the existing solid waste management system.



Figure 3. Desired Waste Management System for the Municipalities

Source: Developed by the researchers (2020)

The attributes mentioned in Figure 3 will clarify the position of the existing situation. Where it says diversification is necessary in all the places, like, commercial, industrial, household, hospital etc. but yet it is not in practice. Talking of an integrated waste management system ensuring proper collection, transportation, separation, processing, and disposal nothing is conducting accordingly (de Oliveira et al., 2012). On the other hand, where a sustainable solid waste management system should be cooperative of participatory ensuring active participation of authorities, stakeholders, scavengers, wholesalers, recycling factory but in this case these are completely absent. At last, ensuring 3Rs in every town and cities in order to achieve, zero waste, zero pollution and zero landfill seems completely impossible unless the following measures are taken,

1. Necessity of framing strict and efficient policies for sustainable management of urban solid waste is essential;
2. Government must patronize the local authorities in this issue;
3. Local authorities must be brought under a regulation and should be given targets to make them more serious in this regard;
4. Implication of environmental laws should be enforced;
5. Land should be allocated for each of the three Municipalities as soon as possible for dumping of the solid waste sustainably;
6. Solid waste management system must be integrated with efficient collection, transportation, separation, processing and disposal system;
7. Participation and interaction among authorities, stakeholders, scavengers, whole-seller shops, recycling shops must be ensured.
8. Financial, institutional and technical capabilities of each Municipality should be increased;
9. Different waste management strategies should be devised and designed for managing residential, commercial, industrial and medical wastes.

CONCLUSION

With the emergence of human civilization, the authorities from highest level to lowest level, government and non-government organizations, planners and residents, all have to be more conscious, efficient and competent and seriously sensible to tackle the challenges yet to come. The good consequences, pleasant and embellish future of human being are almost depended on the noble will of the people's representatives i. e. politicians, authorities, related government and non-government organizations and the conscious citizens of a country. But in most cases, it is seen and proved that some causes harm our clean and clear favorite environment. It affects human being severely with huge cost. We can get rid of danger of environmental degradation only by implementing the Sustainable Development Goals (SDGs) as the part of our policies. The success of SDG 11 pertaining sustainable cities and communities depends on some important factors. One of the important factors is sustainable waste management system. The introduction of SDGs and giving extreme priority in every sphere of environment is enough to make us understand the importance of sustainable solid waste management for making a habitable town or city. Following a planned way, managing solid wastes of Municipalities can be effective for developing sustainable management of urban solid wastes from both environmental and economic perspectives.

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RELATIONSHIP BETWEEN HUMAN CAPITAL INVESTMENT AND EMPLOYEES' WORK EFFICIENCY IN ATAP BAUCHI: THE RELEVANCE OF TETFUND INTERVENTIONS

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Abstract

As it is an established fact that, no nation or organization develops beyond the intellectual ability of its human resources. Nowadays, investment on human capital is paramount to sustain labour force participation in the progress and development of higher education in Nigeria. Besides, the Nigerian Universities and Colleges of Education, the polytechnic system provides another option for higher education in Nigeria where Certificates, National Diploma and Higher National Diploma courses are offered and awarded. The study aimed at evaluating the relevance of TETFund intervention on human capital investments and its bearing to employees' work efficiency in the polytechnic communities in Bauchi state to be specific and Nigeria by extension. This study generates data from quantitative and qualitative sources, using questionnaire instrument to randomly collect a cross sectional data from one of the two (2) existing polytechnics in Bauchi state of Nigeria. A total of 45 structured questionnaires were administered on our respondents and 44 were valid for analysis. The research adopted the descriptive statistics as well as the Chi-square, X², to analyze the results and test the hypothesis to give the tentative prediction about the nature of the relationship between the research variables. Thus the research believes that there is a significant relationship between TETFund intervention in human capital investment and employees' work efficiency within educational polytechnic system in Nigeria. This research study recommended for the public organizations in Nigeria especially the education institutions to harness and take full advantage of the reciprocal benefits of human capital investments and the work efficiency in educational tertiary institutions as this will go a long way to raise organizational achievement towards an end with the least amount of resources.

Keywords: Human capital Investment, Relevance, Polytechnic, TETFund, Work efficiency

Abstrak

merupakan fakta bahwa tidak ada bangsa atau organisasi yang berkembang melebihi kemampuan intelektual sumber daya manusianya. Saat ini, investasi pada sumber daya manusia sangat penting untuk mempertahankan partisipasi angkatan kerja dalam kemajuan dan perkembangan pendidikan tinggi di Nigeria. Selain itu, Universitas dan Kolese Pendidikan Nigeria, sistem politeknik memberikan pilihan lain untuk pendidikan tinggi di Nigeria di mana program Sertifikat, Diploma Nasional, dan Diploma Nasional Tinggi ditawarkan dan diberikan. Studi ini bertujuan untuk mengevaluasi relevansi intervensi TETFund pada investasi modal manusia dan hubungannya dengan efisiensi kerja karyawan di komunitas politeknik di negara bagian Bauchi secara spesifik dan Nigeria dengan perluasan. Penelitian ini menghasilkan data dari sumber kuantitatif dan kualitatif, menggunakan instrumen kuesioner untuk mengumpulkan data secara acak cross sectional dari salah satu dari dua (2) politeknik yang ada di negara bagian Bauchi Nigeria. Sebanyak 45 kuesioner terstruktur diberikan pada responden kami dan 44 valid untuk analisis. Penelitian ini menggunakan statistik deskriptif serta Chi-square, X², untuk menganalisis hasil dan menguji hipotesis untuk memberikan prediksi tentang sifat hubungan antara variabel penelitian. Dengan demikian, penelitian percaya bahwa ada hubungan yang signifikan antara intervensi TETFund dalam investasi modal manusia dan efisiensi kerja karyawan dalam sistem politeknik pendidikan di Nigeria. Studi penelitian ini merekomendasikan kepada organisasi publik di Nigeria terutama lembaga pendidikan untuk memanfaatkan dan memanfaatkan sepenuhnya manfaat timbal balik dari investasi modal

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manusia dan efisiensi kerja di perguruan tinggi pendidikan karena ini akan sangat membantu untuk meningkatkan pencapaian organisasi menuju tujuan. dengan sumber daya paling sedikit.

Kata Kunci: Investasi Sumber Daya Manusia, Relevansi, Politeknik, TETFund, Efisiensi Kerja.

INTRODUCTION

The final cornerstone for the prosperity of nations is human resources, not money. Production factors are capital and material resources; human beings are the active agents who accumulate capital, exploit natural resources, establish social, economic and political institutions and carry out national growth (Anaduaka, 2014). On its physical and human capital stock, the economic stability and functioning of a nation depends. While the former has historically been the focus of economic study, social and behavioral science research is increasingly driven by factors that affect the improvement of human skills and talent (Adekola, 2014; Adeyemi & Ogunsola, 2016).

People at work are of vital importance because failures are people's failures in most organizations. People are hiring, encouraging, coordinating, guiding, mobilizing and determining which product and service quality should be given (Khalid & Anuar, 2020). Human resource planning's success is paramount to the organization's survival and the challenges associated with the planning process and tremendous (Samwel, 2018). Human resources planning leads to the introduction of a new model in the organization, helps organizations assign resources, decide priority, organize power, make informed decisions and determine goals, in addition to providing the basis for other managerial tasks and being a precondition for other managerial effectiveness. Clearly, through the human resources metrics, companies are more proactive in planning the future of the organization: employee morale, applicant/acceptance ratio, development hours per employee, employee competence/flexibility steps, employee suggestions/turnover ratio. It also contributes to the comprehensive and intense production of human resources.

The search among organizations around the world to accomplish more with less is always on the rise. Again, it is very clear that organisations are committed to developing their Human Resource Management (HRM) activities, which are believed to be a sine qua non for productivity globally. A cursory look at the performance of the Tertiary Education Trust Fund (TETFund) in Nigeria in recent years points to the reality that, although all are related, the practices of Human Resources Management (HRM) correlate significantly with employee job performance (TETFund, 2011). However, it was proposed that continuous analysis of HRM activities could be used for organisations to move over time. However, Tabiu & Nura (2013) Despite the tremendous importance of Human Resource Management (HRM) activities in achieving employee job performance in particular and organizational performance in general, many companies do not prioritize their efficient usage in order to ensure organizational performance in developing countries such as Nigeria.

Several previous studies in this area found, the culture of human resources planning is virtually absent just as the case may be with the educational sector (i.e. ranging from the nursery, primary and secondary schools to the polytechnics and as well as the universities) (Bello et al., 2020). With the reality on ground, Asiabaka and Odionye (2011) posited that: available record shows that the number of academic staff in the Nigerian Federal Universities is far below that of non-academic staff. Some of the universities depend on part-time and adjunct lecturers to make up for the deficiencies in the number of academic staff. A good number of the professors are fast approaching retirement age, but there are no comparable ready replacements for them. The younger lecturers appear not to show the level of

commitment for older professors exhibited, consequently, the retirement of a professor leaves a big vacuum. On another dimension, the issue of quality of the available academic staff is not adequately addressed, for that reason, Wong & Chiu (2020) emphasized that there is evidence that some lecturers in tertiary institutions ought not to be there by virtue of their academic background, low integrity, poor attitude to research and teaching, and discipline.

Asiabaka and Odionye (2011) observed that many of the best brains have consistently and gradually sort for and gained employment outside the country. Some highly trained academic staff who went for short courses, conferences and workshops outside the country used the opportunity to made necessary contacts that facilitated their securing employment in foreign countries. Thus, this study proffered solutions for a continuous and complete re-structuring of the human resource management model in our educational tertiary organizations today to reduce the risk linked with human capital development in the Nigerian educational tertiary institutions.

RESEARCH METHOD

This study generates data from quantitative and qualitative sources, using questionnaire instrument to randomly collect a cross sectional data from the state owned polytechnic representing one of the two (2) existing polytechnics in Bauchi metropolis. A total of 45 structured questionnaires were administered on our respondents and 44 were valid for analysis. An in-depth face to face interview and Focus Group Discussion was carried out on 7 informants (Stakeholders and target beneficiaries) to corroborate the quantitative results. In line with the view of Creswell (2014) questionnaire return rate is considered high and sufficient if it exceed 50 percent of the total dispatched to the field.

A structured questionnaire was developed and used in capturing respondents' perceptions on the positive roles of TETFund to human capital development. Descriptive statistical instruments in the form of frequency and percentage distributions were used in the initial data reduction stage, and then Chi square, X^2 , was computed to determine how significant the academic staffs' perceptions of human capital investment and it overall bearing on their work efficiency particularly in Bauchi state and the country in general. The researcher adopted the Chi-Square goodness-of-fit test to test the hypothesis. The Chi-Square statistics formula is given as: $X^2 = \text{Summation of } (O_i - E_i)^2 / E_i$, Where, O_i = Observed frequency and, E_i = Expected frequency. The degree of freedom $n = 5$, $V = 5 - 1 = 4$ and the level of significance = 5% or 0.05. **Note:** E_i = Total frequency 45 divided by 5 = 9

RESULTS AND DISCUSSION

Conceptual framework of TETFund Academic-based intervention programmes

In addition to strengthening, fostering and enhancing TEI's human and institutional capacities in teaching, study, entrepreneurship and growth of the Nigerian knowledge-based economy through successful implementation and delivery of interventions, the achievement of Nigeria's Vision 20:20:20 is essential to all TETFund Academic-based intervention programs. In other words, the department's academic intervention programs are designed to launch beneficiaries of TETFunds into world-class institutions with high-level capabilities to withstand and succeed in global competitiveness on the world market, effectively drive Nigeria's knowledge-based economy and continually engineer highly qualified manpower output (TETFund, 2015).

Thus, through planning the human resources, management strives to have the right number and the right kinds of people, at the right places, at the right time, doing things, which result in both the organization and the individual receiving maximum long-run benefits (Bauchmüller et al., 2014). Obviously, the human resources planning in Nigeria faces the challenge of attracting and retaining the best possible academic staff. The polytechnic and university systems are in constant competition with the industrial and business community. Corporate bodies attract the young brilliant polytechnic or university graduates who would have gained employment in the polytechnics or universities as an instructor or graduate assistants respectively. This caliber of people, if employed, would have taken up post graduate studies and joined in the strengthening of the Nigerian polytechnic or university education programmes.

TETFund strategies for effective implementation of research & development

Since, there are rapid advances in information technology, science, corporate governance, transportation, agriculture, inventions, manufacturing and many more. We have been experiencing the jet age, a period of social and economic change brought by speed, fastness in transcontinental, intercontinental and global connectivity in knowledge, wisdom, learning, travels and human relation followed by the dynamisms of the current information age. A period characterized by the ability of individual to manage at the speed of change, to instantly access knowledge, skill, competencies and learning at any point in time for individual, corporate and national success. This has transformed to a digital age, marked by multi-dimensional business information system following the invention of General Purpose Electronic Digital Computer in 1946, the Mathematical Framework Theory of Information in 1948, the World Wide Web (www) in 1989, the Digital Television in 1990 and the Digital Radio in 2004.

Recent Programme International Study Assessment (PISA) The Organization for Economic Cooperation and Development (OECD) analysis of 65 countries indicates a negative association between student education output in a country and total earnings (percentage of GDP) extracted from natural resources such as oil, gold, diamonds, etc. The study provides an insight into current problems: countries that are endowed with natural resources are jinxed with what has been called "Dutch Disease" or natural curses. This is because countries are almost trapped in the pitiful vortex of burgeoning natural resources, Never go into production or artistic technology. By institutionalizing and encouraging research and development, Nigeria will reverse all paradoxical development indicators (R & D). Via collaborations with tertiary institutions, research centres, regulatory agencies and the private sector, TETFund has agreed to play its role in this respect.

This could be the beginning of a more prosperous future for this country if all main stakeholders join us, and it is only them that our higher education institutions can guarantee their survival in the world's ever evolving and highly competitive knowledge-driven economies (TETFund, 2015). 70% of Research & Development funds come from the manufacturing sector in most western countries. Just 0.2 percent in Nigeria comes from the manufacturing sector. Nothing clearly portrays the deficiency in driving R&D in Nigeria as the lack of a national R&D regulation and strengthening forum. The development of the R&D Foundation was delayed. When a National R&D Foundation is set up in Nigeria, the demand for concerted efforts can be easily accomplished. This will ensure that the national system for maintaining and implementing R&D is organized. The National R&D Foundation is responsible for supporting and enforcing legislative, rather than executive, R&D policies. Such a foundation shall promote an effective interface between research centers or tertiary institutions, the government and the private sector, in particular the industrial sub-sector of the economy, when developed by law. Among other items, the

National R&D Foundation should be charged with promoting, tracking and controlling the compulsory contribution of, say, 0.5% of the annual budget of all registered organizations (both profit and non-profit) for the purpose of R&D, which must be established by law in order to channel, use and implement it for the shared benefit of researchers and the private sector (TETFund, 2015).

Findings

The research adopted the descriptive statistics as well as the Chi-square, X^2 , to analyze the results and test the hypothesis to give the tentative prediction about the nature of the relationship between the research variables. The perceptions on the significant roles in hypothesis involve human capital investment and employees' work efficiency in educational polytechnic system. HYPOTHESIS: There is a significant relationship between TETFund intervention in human capital investment and employees' work efficiency within educational polytechnic system in Nigeria.

Table 1 just discloses the result of the respondents' perceptions of TETFund's human capital investment and employees' work efficiency in polytechnic system in the study area.

Table 1. Response on link between human capital investment & employees' work efficiency

Response	Frequency	Percentage
Strongly Agree	14	31.8
Agree	16	36.4
Uncertain	3	6.8
Disagree	6	13.6
Strongly Disagree	5	11.4
Total	44	100

Source: Field Survey (2017)

As deduced from the table above, 14 (31.8%) and 16 (36.4%) of the respondents strongly agreed and agreed respectively that the human capital investment by TETFund have helped boost the employees' work efficiency in polytechnic system in the study area while 3 (6.8%) and 6 (13.6%) of the respondents strongly disagreed and disagreed respectively, whereas 5 (11.4%) of the respondents were indifferent on the notion. The breakdown of the analysis shows that most respondents supported the hypothetical statement that "there is a significant relationship between TETFund interventions in human capital investment and employees' work efficiency within educational polytechnic system in Nigeria".

Accept the alternative hypothesis if the measured Chi-square value is greater than the Chi-square table value, but if not, reject the alternative and accept the null hypothesis see table 2.

Table 2 . the results of the questionnaire

O _i	E _i	O _i - E _i	(O _i - E _i) ²	(O _i - E _i) ² /E _i
14	9	5	25	2.78
16	9	7	49	5.44
3	9	(6)	36	4.00
6	9	(3)	9	1.00
5	9	(4)	16	1.78
Total				15

Source: Field Survey (2017)

Discussion

Since X^2 is determined, the value 15 is lower than the value extracted from X^2 , i.e. 36.23 of the degree of freedom (n-1), we reject H1 (alternative) at the 5% significance level and accept H0 (null

hypothesis). Via this test, it shows that the human capital investment of the TETFund have been effective in boosting the morale of staffs towards work efficiency within the educational polytechnic system in Nigeria. The result of this study is in congruent with the assertions proffered by the previous studies (Aluede et al., 2012; Gomez-Mejia et al., 2007; Hendry & Pettigrew, 1990). Even though performance is often times It can also be calculated by the combination of predicted activity and task-related aspects, defined by financial figures. In fact, performance based on an absolute value or relative judgment may represent overall organizational performance. Tabiu & Nura (2013) Employee work output has been graded into 'will-do' and 'can-do'. The former refers to the expertise, skills, abilities and other characteristics (KSAOs) of individuals needed to perform such work, and the latter denotes the level of motivation that individuals might have to perform their work.

Human capital investment is a great way to improve the quality of human resources. The higher the human capital development the higher is the quality of the workforce in a workplace. This if all qualified workforce is actively involved in the workplace, there will increase the output of goods and services in an organization, which in turn drive economic growth. Economic growth, will create new investment, create jobs, and absorb the labour force, which in turn will make the population very productive. A highly qualified person who masters technology can generate added value and encourage economic growth, Seran (2019) found that 23% of US economic growth in the period of 1909-1929, contributed by the increasing of the average education level of the workforce. The contribution was then increased to 42% in the period of 1929-1957. A similar study conducted by Schultz, in his book: Capital Formation by Education, he compared turnover rate between human capital and physical capital towards economic growth. From this comparison, Schultz (1964) found that a fairly high proportion of output growth in the USA caused by education investment in the development of human resources.

CONCLUSION

Since the affirmative purpose of human capital investment is to increase the degree of organizational success, consequently, this particular study have supported the assertion that organizations involved in human capital planning achieve better performance on the basis of various performance indicators than those that do not. Yes, this is true with organizational performances in tertiary educational institutions of Nigeria being that the results of this research study indicated that the TETFund intervention in training/development of the academic staffs of polytechnic exponentially lead to their work efficiency in the polytechnic system. Therefore, training and development which translate into In several studies, work performance has become one of the important metrics for assessing organizational performance. As this research study examined the effects of TETFund intervention on human capital investments using polytechnic system instead of colleges of education and universities, then, this research study recommended for the public organizations in Nigeria especially the education institutions to harness and take full advantage of the reciprocal benefits of human capital investments and the work efficiency in educational tertiary institutions as this will go a long way to raise organizational achievement towards an end with the least amount of resources. The study also recommended for the human resources planning as it does enhance organizational performance Through the efficient and successful pursuit and achievement of goals. The protective function is to reduce risks by reducing business uncertainties and clarifying the implications of related management behavior.

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SOCIAL DEVELOPMENT THROUGH INTERNATIONAL RELATIONS

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Abstract

With the horrific incident on September 11 in the US, the US armed forces entered Afghanistan to shut the door to terrorism. Now, Afghanistan opens a new page for Afghanistan's internal and external political system. Afghanistan as a country that has pursued regional cooperation from neighboring countries, especially from India. India is the most promising country for Afghanistan's foreign policy and diplomatic relations in areas such as economic, cultural, technical, capacity building, military and other growth. The purpose of this study is to examine the development process of the two countries India and Pakistan in an effort to establish international relations. With a qualitative approach This research resulted in India being one of the countries which, after September 11, 2001, and the leadership of the Taliban, succeeded in gaining more opportunities for the people of Afghanistan. His non-hostile contributions to Middle Eastern and Middle Eastern countries have created a special place for the people of Afghanistan. India after independence in 1947, started friendly relations with Afghanistan two years later, until now, has enthusiastically and dedicably made their contribution to Afghanistan. The people of Afghanistan in this case get many benefits from India's bilateral relations, namely the construction of the Salma Dam in Herat, Delaram Road Development, Allotment of 1000 Afghan Student Scholarships in Human Resource Development per year, the Repair of the Afghan Foreign Minister Complex, the establishment of the Afghan Parliament Building, the Opening of Chabahar Port, Strengthening the Equipment of the Afghan Military Forces, Air Corridors, and India's efforts to get Afghanistan to gain Membership in Regional Cooperation Bodies such as SAARC, BRICS, Asia Heart 'Istanbul Process'.

Keywords: International Relations, Foreign Policy, India and Afghanistan, Bilateral Relations, Post-11/09 Insurgency, International Cooperation, Social Development.

Abstrak

Insiden mengerikan pada 11 September di AS, angkatan bersenjata AS memasuki Afghanistan untuk menutup pintu terorisme. Sekarang, Afghanistan membuka halaman baru untuk sistem politik internal dan eksternal Afghanistan. Afghanistan sebagai negara yang mengupayakan kerjasama regional dari negara tetangga khususnya dari India. India adalah negara paling menjanjikan untuk kebijakan luar negeri Afghanistan dan hubungan diplomatik di berbagai bidang seperti ekonomi, budaya, teknis, pembangunan kapasitas, militer dan pertumbuhan lainnya. Tujuan dari penelitian ini adalah untuk mengkaji proses perkembangan kedua negara India dan Pakistan dalam upaya menjalin hubungan internasional. Dengan pendekatan kualitatif Hasil penelitian ini menjadikan India sebagai salah satu negara yang, setelah 11 September 2001, dan kepemimpinan Taliban, berhasil memberikan lebih banyak peluang bagi rakyat Afghanistan. Kontribusinya yang tidak memusuhi negara-negara Timur Tengah dan Timur Tengah telah menciptakan tempat khusus bagi rakyat Afghanistan. India setelah kemerdekaan tahun 1947, memulai hubungan persahabatan dengan Afghanistan dua tahun kemudian, hingga sekarang, dengan antusias dan penuh dedikasi memberikan kontribusi mereka ke Afghanistan. Masyarakat Afghanistan dalam hal ini mendapatkan banyak manfaat dari hubungan bilateral India, yaitu pembangunan Bendungan Salma di Herat, Pembangunan Jalan Delaram, Penjatahan 1000 Beasiswa Mahasiswa Afghanistan dalam Pengembangan Sumber Daya Manusia pertahun, Perbaikan Kompleks Menlu Afghanistan, Pembentukan Gedung Parlemen Afghanistan, Pembukaan Pelabuhan Chabahar, Penguatan Perlengkapan Pasukan Militer Afghanistan, Koridor Udara, dan upaya India agar Afghanistan memperoleh Keanggotaan di Badan Kerja Sama Regional seperti SAARC, BRICS, Asia Heart 'Istanbul Proses'.

Kata Kunci: Hubungan Internasional, Kebijakan Luar Negeri, India dan Afghanistan, Hubungan Bilateral, Pemberontakan Pasca-11/09, Kerjasama Internasional, Pembangunan Sosial.

INTRODUCTION

India is a vast land of liberty and freedom as it has been exposed to ideas of equality, liberty and fraternity from the western world and colonial rule of British indirectly facilitated to the process of modernization (Cook, 2013). Immediately after gaining independence, India adopted the principles and themes of democratic, secular, socialist and republic so that Indian is known secured its own unique identity in the world. Indian leaders such as Mahatma Gandhi, the father of India, Jhar Lal Nehru, the first Prime Minister of India, Dr. BR Ambedkar, the Architect of Indian Constitution, Bhagat Singh, a dynamic leader of left-wing, Moulana Abdul Kalam Azad, the Education Minister of India laid great foundations for the secular-socialist and democratic nation and nationalism (Cook, 2013). However, the people of India achieved their own country, and enjoy peace and tolerance within the precincts of rule of law and the law of justice.

Afghanistan is also a country of diverse cultures and is considered as the 'roundabout of the ancient world' (Hyman, 2016). Those who settled included the Persians, under Darius the Great (522-486 BCE); and the Greeks, led by Alexander the Great (356-323 BCE). Many present-day towns are built on Greek foundations. A Buddhist civilization flourished from the late first century CE, its kings reigning in Bamiyan until the end of the 10th century (Hyman, 2016). An Arab raid on Kandahar in 699-700 brought Islam, strengthened as the Turks gained power in Iran, Afghanistan and India. The Mongolian Genghis Khan invaded in the 13th century. For the next few hundred years Afghanistan was fought over by various Indian and Persian empires. Finally, in the 18th century, a group of Pashtun tribes under Durrani (aka Ahmad Shah Abdali) defeated the Moghuls and the Persians and consolidated its own large but unstable empire.

The Third Anglo-Afghan War in 1919 led the British to give up control of Afghanistan's foreign affairs finally in 1921 (Singh, 2017). However, Afghan Victory Day is celebrated as a national holiday in Afghanistan on 19 August to commemorate the Anglo-Afghan Treaty of 1919 and relinquishment from protected state status. The Government operation in Afghanistan historically has consisted of power struggles, coups and unstable transfers of power (Braithwaite & Wardak, 2013). The country has been governed by various systems of government, including a monarchy, republic, theocracy, dictatorship, and a pro-communist state. Although King Amanullah Khan takes the throne after the Third Anglo-Afghan War from British, Loya Jirga adopts new constitution to reconstruct the government as an Islamic republic in 2003. From 1919 to 2003, it was the country survived without Constitution and the Islamic law had been practiced in Afghanistan. Finally, it is an Islamic republic consisting of three branches of power (executive, legislative, and judiciary) overseen by checks and balances.

Meanwhile, Mohammed Omar, founder of the Islamic Emirate of Afghanistan, is declared Commander of the Faithful at Kandahar and his Taliban forces begin conquering the northern parts of the country in 1996 but the United States and coalition forces invade Afghanistan and overthrow the Taliban government. In 2001, Hamid Karzai becomes leader of the Afghan Interim Administration at the International Conference on Afghanistan in Germany and Ashraf Ghani is elected as the President of Afghanistan in 2004. India as a neighboring country of Afghanistan has provided laudable interventions not only to eradicate poverty but also to bring peace in Afghanistan. It is needless to say that India and Afghanistan were parts of many rules in the history and have been maintaining cordial and bilateral relations from ancient times. In this context, the present paper is intended to describe and analyses the bilateral relationship between India and Afghanistan as part of their international relations and the efforts and interventions were kept by the both nations during 2001-2016 will be highlighted in the study. Several studies regarding this bilateral relationship have been investigated by Dey et al (2020), Nath (2019) and

Saqib (2019) with a research point of view on the policies of the two countries in carrying out international relations. However, research on the relationship between the two countries requires several new analyzes such as analysis of political protection, economic protection, security protection and cultural protection which will be studied more deeply in this study which can cover the shortcomings of previous studies.

RESEARCH METHOD

The subjects in this study are India and Afghanistan, where the two neighboring countries have long established international relations to help each other in development, especially India where the policies on neighboring countries make India a separate place for the people of Afghanistan (Khalil, 2016), this research is based on a qualitative approach, which uses literature studies, interviews and observations to obtain data (Creswell, 2014), then an interactive analysis process is carried out to compile conclusions into a sentence based on data and facts (Huberman.A.M, 1992), the focus of this research is on bilateral relations carried out by the two countries to confirm the issues and challenges that occur in the relationship between the two countries.

RESULTS AND DISCUSSION

BILATERAL RELATIONSHIP OF INDIA AND AFGHANISTAN

India, after its independence, with the exception of the Taliban government, which has been active alongside until now, its friendly relations have been steadfast and friendly for the sake of economic growth, stability, security and the political security of Afghanistan. In the aftermath of September 11 to the present, India has given Afghanistan a special place in the focus of attention on the economic, cultural, and reconstruction of Afghanistan towards neighboring countries. India, in coordination with the regional countries, has taken tighter steps due to the contribution of Afghanistan's stability and security. Despite this, Afghanistan has become a member of the regional cooperation zone after the overthrow of the Taliban regime and the establishment of a new government in Afghanistan, including good achievements (Nojumi, 2016). It is believed to be within its foreign policy such as: SAARC membership, membership of the BRICS, Co-operation Regional Office and the Asia-Pacific Summit Meeting (Istanbul Process), which has 14 regional countries, 17 partner countries and 12 international partner organizations, has still held six meetings to eradicate terrorism, promoting regional economic activity and cooperation.

That was the case which last summoned on December 4, 2016, in the city of Punjab, India, which was attended by countries in the region and the wider world in order to address the challenges of combating terrorism, drug trafficking, trade and transit development with the countries of the region. Moreover of this "TOPI" project is another step towards economic prosperity in India, Pakistan and Afghanistan. This project is signed between Presidents of Turkmenistan Afghanistan, Pakistani Prime Minister and Minister Government in Indian affairs. Turkmenistan's gas pipeline project to Afghanistan, Pakistan and India established in December 2015, will complete on 2019. Pakistan, Afghanistan, and India, all three countries will benefit from this opportunity towards their economic prosperity, solidarity and stability entire each.

After Fall of Taliban Regime

After fall of the Taliban government, and the September 11, 2001, change in the geography of American politics. And the nations of the world are struggling to fight the nests of terrorism. The Taliban believed that Ahmed Shah Massoud killing would provide the opportunity to seize Afghanistan's territorial integrity. But unaware that the Mujahideen re-established itself after the death of Ahmad Shah Massoud and with the support of the United States, a small geopolitical area under the leadership of the Mujahideen, intensified its attacks on the Taliban, and cleared Afghanistan from the Taliban. India at its foreign policy even at the time the Taliban government did not forget Afghanistan. However, the Taliban government supported the Mojahedin government and after the Taliban regime overwhelmed once again. India's foreign policy towards all the countries of the world, the interim government of the Afghan national unity government, has gained its cooperation in the sectors. Political stability, economic growth, cultural development and open of Afghanistan have been more active.

The visit of Dr. Abdullah Abdullah in the capacity of Afghan Foreign Minister during 13-19th September, 2001 facilitated to have a thorough discussion on the political issues of Afghanistan and India. In return of his visit, the Indian Foreign Minister visited Afghanistan on December 22, 2001 fetched to the Afghanistan to establish new government and adopt the new constitution in Afghanistan, and finally the political relations of Afghanistan and India began to through forward (Rahmany, Personal Communication, March 13, 2015). Further, the political relationship was shaped by Afghanistan, which US policy after September 11, 2001 found that New Delhi and Kabul diplomacy was expanding more actively than other countries in Afghanistan, and wanted to play a more active role in the region, which ultimately resulted in transitional, transitional and elected government Afghanistan has had many meetings with India (Hogg et al., 2013).

After the formation of a new government in Afghanistan, visits to the country's high ranking officials grew, and more and more co-opting ground was established between the two countries. India was ready to cooperate honestly on all issues in Afghanistan. After the formation of the new government in Afghanistan from 2002 to 2013, only Afghan President Hamid Karzai made more than 12 occasional visits to India. Similarly, Manmohan Sing as Indian Prime Minister visited Afghanistan over three times as the highest Indian official.

Hamid Karzai and His Foreign Relations with India

Hamid Karzai's first visit to India on February 27-21, 2002, which spoke on a renewed political relationship between India and Afghanistan and his second visit to India was held on May 8-5, 2003, during which he was given a diploma from Hamchal Purdish University, who had previously completed his higher education at the same university. The honorary doctor was given to Hamid Karzai. The third visit of Hamid Karzai was on 25-28 February, 2005 was to sign at the meeting of the Civil Aviation Development Memorandum between India and Afghanistan. The fourth official visit was in between 13-19 April, 2006 meant to sign the Memorandum of Understanding with senior Indian officials in the field of boosting trade and trade between Indian and Afghan businessmen.

Hamid Karzai's fifth official visit to India on April 3-4, 2007, was due to India's membership in the SAARC Conference, which was recognized at the meeting of Afghanistan as a major member of the SAARC and his sixth official visit was on August 4-3, 2008 to follow up by India's President and Prime Minister in India regarding the relationship and expansion of Afghanistan. He also eventually traveled to Sri Lanka, where he said that the Afghan-friendly relations with Sri Lanka had taken place. Hamid Karzai's seventh

visit to India on April 26, 2010, during which he met with the President and the Supreme Leader of India, talked about the challenges of the settlement of Afghanistan, and also traveled through Bhutan. Eighth visit of him to India during 2-3, February 2011 was to discuss with Indian Supreme Leader India in order to strengthen India-Afghanistan relations. The 9th visit was held on October 3-4, 2011, during which the Memorandum of Understanding on Strategic Cooperation between India and Afghanistan was signed.

The 10th official visit of Hamid Karzai, President of the Islamic Republic of Afghanistan, to India on Monday (November 9, 2012), visited Mumbai for the expansion of India and Afghanistan trade, and met with Indian businessmen, inviting them to invest in Afghanistan. His eleventh visit on December 12, 2013 was aimed at the security cooperation, military equipment and equipment needed by Afghanistan, a memorandum of understanding between the two countries in Radio Azadi 2013.

Mohammad Ashraf Ghani and His Foreign Relations with India

After Mohammad Ashraf Ghani became the second President of the Afghanistan, he visited India on September 2, 2015 to retain the India's economic and military assistance to Afghanistan. Besides, he negotiated with Indian Government for four wheels and also gained a billion dollars donations to strengthen the military system, and a number of other projects on its trip between the two countries. In the background, Ghani welcomed students from India who were studying in India as well as the Defense Forces of India. The second official visit of Ashraf Ghani to India took place on December 4, 2016, at the end of the meeting of the ASIAC heart in Amritsar, Punjab, India, with the participation of 40 countries. At the meeting, representatives from 14 regional countries Afghanistan, Pakistan, Azerbaijan, China, India, Iran, Kazakhstan, Kyrgyzstan, Russia, Saudi Arabia, Tajikistan, Turkey, Turkmenistan, and the United Arab Emirates and which are part of the process 17 countries of cooperation namely Australia, Canada, Denmark, Egypt, France, Finland, (Eg, Germany, Iraq, Italy, Japan, Norway, Poland, Spain, Sweden, United Kingdom and the United States. International partnerships such as the (AKDN), the Asian Development Bank (ADB), the Conference on Confidence Building Measures in Asia CICA, CSTO, ECO, NATO, NATO The Organization for Security and Co-operation in Europe (OSCE), the Shanghai Cooperation Organization (SCO), and the South Asian Association for Regional Cooperation (SAARC)) participated in the summit on counterterrorism, the elimination of drug trafficking, and peace, the expansion of transit routes, and the strengthening of trade between the Hindus of Afghanistan. At the first meeting, Ashraf Ghani emphasized that the Pakistani state had approved the withdrawal of the Terrorism Treaty and approved a 500-million-dollar of Pakistan rejected which had been promised by the Brookside government in response to Pakistan's dearest Pakistan National Security Council which subsequently upheld the anger of the Pakistani government was liable.

Visits of Indian Delegates to Afghanistan

The first visit of Manmohan Singh to Kabul was on August 29-28, 2005, and the Co-operation Agreement on Public Health, Education, Agriculture and the Extension of Relations between the two countries was made on this occasion. During second visit on 13-12-2011 to Kabul, Mr. Manmohan Singh spoke to the people of Afghanistan on the Parliament and granted about a 500 million donation.

After Manmohan Singh, Narendra Modi became Indian Prime Minister who visited to Afghanistan on December 25, 2015 and opened the Afghan parliament's parliament, and emphasized its contribution to the Afghan delegates. His second official visit was to open the Salma Dam in Herat and to its subsequent contributions (Kaura, 2017).

The frequent meetings of high-ranking officials in Afghanistan and India indicate a tightening of relations between the two countries. From the beginning of the interim government to the government and the national administration, the friendship between Afghanistan and India has been regional. The regular meetings between the two countries have made Afghanistan achieve more achievements in the period from 2001 to 2016 in the wider public view of Afghanistan (Morning 8th Newspaper, 2016).

India and Afghanistan: The Fields of Cultural Relations

India and Afghanistan have a long history of cultural relations, one of the Hindu minorities who live in the land of Afghanistan, and the Muslims minorities who are in India shows the cultural relations of the two countries are intertwined, so as to preserve each other and tolerate their friendship without exception, even artists Hindi in Afghanistan has been so influential and accepted by the people of Afghanistan, most Afghan youths can now speak Hindi languages, as well as the Persian language of Afghanistan, the academic atmosphere as a language of interest among students in Indian universities from bachelor up to up to Ph.D. (Masino & Niño-Zarazúa, 2016).

All this aspect shows Afghanistan and India are historically closely involved; India has played a greater role in the various areas of culture, the training of new generation and academic cadres after the establishment of a sovereign government in Afghanistan. India has approved a budget of \$ 91 million over the ten year period up to 2021 to provide scholarship programs for capacity building of Afghan students from undergraduate and graduate level to master and PhD level, which provided great opportunities for scientific and cultural development for the people of Afghanistan, which was welcomed by the Ministry of Higher Education in Afghanistan. So far, Afghan students have graduated from Indian universities and now, according to the Afghan government, 16,000 students are studying in the country in Radio Azadi 2016.

India and Afghanistan: Economic Opportunities and Relations

Afghanistan is the only country in the Middle East that consumes most of its neighboring countries' products like cloths, building materials, electronic and electric gadgets, tools, machinery, transport vehicle and what not. Afghanistan's markets are full of import goods. Pakistan is the only country with the most benefits from its proximity to Afghanistan. However, India has not been deprived of Afghanistan's direct transit, but has been able to export more than dozens of its products, including electronics; cloths, Indian drugs, hygiene products and liquid dishwashing bottles can easily be found in the Afghan market.

Pakistan's use of its economic policies, the stipulation of transit conditions, and the high level of Afghan security forces led Afghanistan to look elsewhere for the Afghan market, which on this occasion signed Afghanistan-Iran Memorandum of Understanding on the Port of Chabahar, which could help Afghanistan's business partners Karachi, and more and more opportunities for Afghan tourists from Chabahar port, which, thankfully, opened the door to new economic opportunities for the three countries. This commentary raised a major concern for Pakistan's emergence of an alarming economic crisis, Chabahar, which has provided more optimism for the Afghan, Indian and Iranian trade, and the expansion of the products of the three countries to the global markets (Rahim, 2016).

India is the only country that has worked effectively with the Afghan government in its economic relations. In particular, Afghanistan can construct the Salma Dam in Herat, the Zarang-i-Delaram Road with a length of 220 kilometers, and other large facilities for expanding construction and commercial projects from this source. In addition of this constructing Afghan Parliament house, the reconstruction of the Palace

house in the yard Ministry of Foreign Affairs, which is known as a symbol of friendship between Afghanistan and India, and other assistance that India has helped Afghanistan, it is also known as the Friendship Day that is July 4, 2016.

India is a developing country that, after America and China, can become the most opportune moment to become the world's largest economic power, while India has become a major caravan of technology, the world economy, and most of the human resources, experts in various fields of markets in the world (Bremmer & Roubini, 2011). As a result, Afghanistan's sustainable friendship can benefit from the benefits of the Indian government.

The Summit of the Asian Heart Summit held in Istanbul on December 4, 2016 with representatives of 14 countries. Besides, a summit had been took place in the capital city of Punjab, India to make a treat of cooperation with 17 countries and international partnerships with 12 countries. The major focuses of the summit was prevention of terrorist activities and achieve sustainable economic development, nevertheless, this summit can be one of the important meetings in 2016. Likewise "TOPI" project is another important projected signed between the heads of Pakistan, Afghanistan and India in December, 2015.

India's Influence on Afghanistan Foreign Policy and Vice-Versa

The geopolitics and geo-economics position of Afghanistan has attracted the attention of all neighboring countries and the region, but foreign policy of India has studied this issue more closely with other neighboring countries and the political policies of Afghanistan. India and other two countries have been very close in their political affairs in the history of the country, but they have honestly cooperated with Afghanistan in various ways, as it turns out. After the September 11, 2001 incident, Afghanistan became aware of global macroeconomic policies, including the United States and its allies in Afghanistan. The external and internal foreign policy of Afghanistan was at the center of the world's great politics.

India, following the advent of the United States and European countries, strengthened its previous cooperation with Afghanistan, and sought to prioritize its neighbors, especially Pakistan in Afghanistan. India's policy has gained a special status not only for Pakistan, but also for relations. The long-standing cultural and spirituality of the people of Afghanistan has become more heated among Afghan citizens. This is when India's measured and well-established policy in Afghanistan has grown to a point where the United States took note of India's policy and tried to consolidate its ties with India (Hashemi-2009:108).

Some argue that India will help Afghanistan with its political ties with Pakistan but the real thing is that India is one of the few countries that pursue its own goals and goals in Afghanistan more than other countries. Meanwhile India sees its foreign policy as an advancement of its country in all its various fields, economic, political, security, stability, and cultural growth.

Afghanistan will be able to find a special place in global politics; these goals are pursued and favoured by their foreign policy. It is clear that Pakistan, contrary to India's beliefs, sees Afghanistan as a disadvantaged vis-à-vis development and struggles to eliminate all evils of the people of Afghanistan (Riddle, 2012).

India, after the United States and China, are struggling to win the third-largest economy in the world. Undoubtedly India's reach for the northern and middle Asia countries has a special status for Afghanistan which brings India closer to its long-term goals. It is clear that the economic power of a country is dependent on the power of relations between the countries, the more India can bring its relations to Central Asia, and the equalizer of India can open economic opportunities. In this regard, the importance of Afghanistan to India is important in the next few years.

The countries of the region also have a special place in the foreign policy of India, this is why, India alone cannot achieve the goals that the countries of the region want. If SAARC is one of the organizations not founded in India. India is trying to play a greater role in terms of regional cooperation and cooperation to Afghanistan. India's interest that Afghanistan became a permanent member of SAARC and Afghanistan became a part of this organization. Afghanistan became the main focal point of the organization and aftermath acquisition of membership of the SAARC by Afghanistan, it is believed that peace, stability, security and economic stability of Afghanistan are in the region and in the world will only prevail (Tamana, 2014).

India is the pioneer of the countries of the region in the economic growth of Afghanistan (Kumar, 2020). In all the spheres, the Provincial Negotiations of the Regional Cooperation Plan can facilitate the Afghan Government for highly negotiated solutions to the problem of instability and dependency, and put a full-stop for assiduous insurgency. Eventually this fetches for the emergence of independent Afghanistan.

Issues and Challenges in India and Afghanistan's Relations

Political Barriers

The geopolitical position of Afghanistan is a key issue that has made Afghanistan the focal point of the attention of the neighboring countries, the region and the world. In the political context of India and Afghanistan, no country is above to Pakistan as it is more critical to create obstacles to Afghanistan, thus, Pakistan has defined Afghanistan's friendship with India as an enemy of Pakistan, while Afghanistan has faced its border problems with Pakistan and India as a border problem in Kashmir. With Pakistan, the problem with India and Pakistan will never be an instrument of hostility between India and Afghanistan. The border line controversy leaves a historic background in the Foreign Relations between Pakistan and Afghanistan, which simply cannot put an end to this dilemma. India has no historical problems in its political engagement with Afghanistan and has always been a green line for Afghanistan and a red line for Pakistan. India pushes Afghanistan for development, peace, stability and security. Afghanistan's foreign policy has made it clear that India has proved to be a far more distant, better neighbour than Pakistan for Afghanistan, which can be a good strategic partner, and has proven these beliefs among the Afghan people.

Another challenge is that Afghanistan, over the past 14 years including the headship of Karzai, has not been able to negotiate properly with Pakistan despite of travelling to Pakistan more than 20 times and this act portrays that the Afghanistan has not purposively delegated Pakistan in terms of diplomacy and cooperation. Karzai's weak and unpopular diplomacy also culminated into various political tensions in Pakistan and resulted in worsen diplomacy between Afghanistan and Pakistan. However, in return for official travels to Pakistan, Karzai traveled to India 11 times and made good travel trips, such as belligerent donations for Afghan's educational development, scholarships for younger generations, aid to strength military and so forth. India has something for some reason urged for the peace and stability in Afghanistan. However, President Karzai remains honest as a strategic friend along with the Afghan people.

India and Afghanistan are trying to expand the political, economic, and cultural relations of each other in a concrete and tangible way, but this strategy is not unbelievable for Pakistan, because it is trying to bring this opportunity to India and Afghanistan through terrorist pressures. Even with India, it tries to expand its representation in the Afghan provinces. But Pakistan, by contrast, is trying to eliminate them in their efforts to destroy them. Because Pakistan believes that the Indian agencies will provide military aid to the opposition in Pakistan. Pakistan, as the neighbor, has the most disappointment with Afghanistan's

growth, prosperity, and development as it was stated by Karzai that India was a good neighbour and friend of the Afghan people, donated by two billion dollars for educational programs. At any cost, India's good relations with Afghanistan will never have a negative impact on the Pakistani neighborhood.

According to the World Organization's intelligence agencies, there are 30 terrorist groups that target the insecurity in the region and Afghanistan; these threats have been creating worries between India and Afghanistan (Williamson, 2016).

Cultural Barriers

Afghanistan and India enjoy a long historical foundation, if look at the history of India and Afghanistan, one can see that the Persian language of Dari in India has a history of 800 years. The Persian language was considered to be the official language in India for a long period, therefore, libraries in India have thousands of books/works in Persian language. According to information available, there are more than 50 Persian language departments exist throughout Indian universities, but they used to be written and spoken in English. Few speak Persian in academic and public places. This may be reduced the speaker of Persians in India.

India and Afghanistan had a history of cultural activities that is before the advent of the country called Pakistan. Afghanistan had a full range of Indian cinema productions and used to engage in cultural leanings. For example, Professor Mohammad Hussein Sarahang is one of the most famous artists in Afghanistan who has been in contact with Indian musicians, making his artistic activities along with Indian-singers. As Afghan people listen to Bollywood music in Hindi, the high cultural quality of the music industry in Afghanistan is gradually augmenting. Nowadays Afghan youth can easily speak Hindi while Afghan music is not definitely seen by the Indian youth due to the lack of artists and absence of quality film industry. It should be noted that security problems in Afghanistan are another challenge for the Indian artists to cooperate with Afghan artists on the activities of the film industry.

More number of academic exchange and activities are being taken place in India and that can be seen from 16,000 Afghan students in Indian universities wherein they pursue quality education and encompassed with healthy academic nexus and links in Radio Dari 2016.

Economic Barriers

The Chabahar port is considered as a new opportunity for the growth of the Afghan economy and a red line for Pakistan, which Pakistan has been trying to overcome in the wake of a major economic crisis in Afghanistan. It will explore this prospect's opportunity through insurgency, the insecurity of the region's instability for the Red Line's port. Based on Pakistani economic experts, the concerns that the Chabahar port will face stagnant Pakistani economic revenues as it will face the economic challenge. However, this is the one among main reasons for Pakistan's misconceptions about Afghanistan. These concerns have made Pakistan unleashes the opportunity and will face any major threats.

India's contribution to regional cooperation and to the Afghan economy are another concerns so as Pakistan seeks to diminish important meetings of regional and international cooperation in order to create challenges to break the path desired goals to be achieved by of India and Afghanistan. Pakistan, despite the trade agreements between Afghanistan and India, has never been honest with the agreements it has made, but vice-versa is trying to keep business opportunities between India and Afghanistan intolerable. The political climate between India, Afghanistan and Pakistan is a challenge so far and as of now. The big business is the regional business that has faced business in the slow-moving all the regional countries.

The Durand line between Afghanistan and Pakistan is the reason of conflict and disturbing friendship of its neighbouring countries, thereby, some sort of unrest also prevails in the Middle East. As a result, it makes the regional business impossible and creates many political challenges. Afghanistan usually exports its fresh fruits to Pakistan and Pakistan used to send cloths, pulses and other food products in return. When the political uncertainty is created by Pakistan with regard to Duran line, Afghanistan faces a variety of challenges and prices of imports from Pakistan will be raised like anything. Lack of transit ports in Afghanistan to export fresh fruits, Afghanistan always depends upon Pakistan's transit affiliation but this dependency usually badly treated as a tool of political pressure by Pakistan. It has been seen repeatedly that when a hot political tandem flared between Pakistan and Afghanistan, Pakistan would immediately take this opportunity for Afghanistan's dependence on the port of Karachi to curtail the economic growth of Afghanistan (Hafizullah, 2018).

Security Barriers

One of the major challenges facing the security of India and Afghanistan, both of which are fighting against the common enemy, is terrorism, narcotics and anti-trafficking around the border of both countries. Secondly the Historical Dilemma of the Commonwealth of Kashmiri Indians and the Durand Line between Pakistan and Afghanistan is one of the major issues that may make tensions between the three countries. The third barrier is that supporting and developing terrorism on the borders of India and Afghanistan is one of the major challenges facing stability and security between the two countries. Fourth is the lack of control over the border lines of India and Afghanistan has led to greater threats to the security and stability of India and Afghanistan. Fifth is that Saudi-American financial support for Pakistan and the region is one of the major challenges facing Afghanistan and India. The last barrier is that Afghanistan and India are struggling to have a stable, developed country to use new approaches and to achieve their full stability and integrity. But Pakistan considers India's entry into Afghanistan one of the main challenges and it challenges the friendship of India and Afghanistan, thus, it is a barrier in way. While India views stability in Afghanistan as to maintain the stability in the region and the world, it continues to foster stability and plans for peace and reconciliation with terrorism in cooperation with partner organizations and the region.

CONCLUSION

India and Afghanistan share the same history and friendship, while India has not had any differences in political, economic, and cultural relations with Afghanistan in the past, and India has consistently responded to the pulse of the policies of the region and Afghanistan. In this regard, Afghanistan has always supported India's foreign policy and has described India as an appropriate neighbor in its political affairs. In all of the polls that have taken place, the people of Afghanistan have called India as the true friend of Afghanistan. Pakistan's friendship has created a general concern for Pakistanis, while Pakistanis have defined India's friendship with Afghanistan as an enemy of Pakistan, because Afghanistan will never share the disagreements that India has with Pakistan. India has never cut off its aid for certain goals and has not provided the aid to Afghanistan with any preconditions during the course of its history, and has continued its assistance. While the people of Afghanistan love the India as a country and the people of India with a special respect. They always celebrate the friendship of India and Afghanistan as they know that India is the only true friend of Afghanistan, and feel that India is for neighboring countries to offer sincere cooperation with the developed Indian model of tolerance.

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ESTABLISHING THE NEXUS BETWEEN CLIMATE CHANGE, FORCE MIGRATION AND FOOD PRODUCTION/SECURITY IN NIGERIA: RESEARCH OBSERVATIONS OF HISTORIAN AND AGRICULTURIST

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Abstract

This research tries to interrogate the readiness of Third World countries for the challenges facing climate change, the consequences of this climate change will affect more than 200 million people which make fish resources severely reduced and other species migrate which makes inhabitants even more miserable. Coastal communities can also be displaced by rising sea levels and will be forced to find new housing and new livelihoods. This will pose new risks to food security, food security and human health. Using a qualitative approach and historical research methods to find past experiences to solve this problem. This research results that most of the damage to the ecosystem is done by humans to survive without paying attention to environmental factors and we also find history. Experts have realized the importance of forests as an antidote to climate change, but the implementation in the field of protection is still lacking.

Keywords: Climate Change, Coastal Communities, Food Production, Nigeria

Abstrak

Penelitian ini mencoba untuk menginterogasi kesiapan negara-negara Dunia Ketiga dalam menghadapi tantangan perubahan iklim, akibat dari perubahan iklim ini akan mempengaruhi lebih dari 200 juta orang yang menyebabkan sumber daya ikan berkurang drastis dan migrasi spesies lain yang membuat penghuninya semakin sengsara. Masyarakat pesisir juga dapat terlantar karena naiknya permukaan laut dan akan terpaksa mencari perumahan baru dan mata pencaharian baru. Ini akan menimbulkan risiko baru bagi ketahanan pangan dan kesehatan manusia. Menggunakan pendekatan kualitatif dan metode penelitian sejarah untuk menemukan pengalaman masa lalu dalam memecahkan masalah ini. Hasil penelitian ini bahwa sebagian besar kerusakan ekosistem dilakukan oleh manusia untuk bertahan hidup tanpa memperhatikan faktor lingkungan dan juga kita temukan sejarahnya. Para ahli telah menyadari pentingnya hutan sebagai penangkal perubahan iklim, namun implementasinya di bidang perlindungan masih kurang.

Kata Kunci: Perubahan Iklim, Masyarakat Pesisir, Produksi Pangan, Nigeria

INTRODUCTION

Food Production and Security is used in this paper to refer to human activities tied to agricultural practices aimed at providing for the human society. It is in line with this that the paper defines Food Production The art and science of soil cultivation, livestock production, livestock feed preparation, human processing of crops and livestock, and the process of selling excess crops and livestock. This ensures adequate production and equitable distribution of food, as well as the establishment of a national food production and distribution system, regional and household food security system that will guarantee availability of, and reasonable prices for food at all times, irrespective of periodic fluctuations and vagaries, of weather (Ikymbe, 2012). In Nigeria, this process contributes 40 percent of the Gross Domestic Product (GDP) of the nation, which, in practical terms, means contributing more than oil, construction, banking and

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tourism to the nation's total production wealth. Experts have argued that oil contributes only 15% to the nation's GDP in economic terms., while food production industry/production make up for the rest (Okogie, 2012).

Studies have shown that climate change is a normal part of the natural variability of the Earth, which is linked to atmospheric, ocean, and land interactions, as well as changes in the amount of solar radiation that reaches the Earth. This has been going on for decades, but what is alarming is the speed at which it happens. This has affected agriculture and other related economic activities worldwide in multiple ways. In the case of Nigeria, the situation is alarming due to people's neglect of early warning signs due to high-level corruption, neglect, poverty and lack of political will. The result is that while other nations have been able to experience the minimum impact through investment and control, Nigeria and Nigerians have been made aware of it, threatening not only food security, but also human existence (Emmanuel Osewe, 2012). This is because since the 2012 flood incident, the aquatic resources have become less abundant, while professionals complain that important species have moved to other areas where they are less available to the fishermen. Apart from this, livestock and other aquatic resources are exposed to new pest and diseases that flourish only at specific temperature and humidity

Several previous studies on food security in Nigeria have been studied by Adebayo & Ojo (2012), Eme et al (2014) and Matemilola (2017) has provided the initial foundation in the development of research in this field. However, no one has yet conducted an analysis through the history and phenomena of agriculture in Nigeria, for this reason this research will focus on these two things in analyzing the readiness of Third World countries, especially Nigeria to face the challenges of climate change that can affect national food security. This research can have an impact on Nigeria's food security and as a solution to dealing with extreme climate change.

RESEARCH METHOD

This research uses a qualitative approach with historical research methods (Law, 2012), this method is taken to find solutions for the future by looking at the habits of the past. besides this research also takes data from literature studies and cites various kinds of arguments from experts and government agencies to be used as primary data in this study (Creswell, 2014), besides that triangulation techniques are used to ensure that the data the author gets are facts and analyzed with analytical techniques content. Taking the object of research in the country of Nigeria because, this country has lost a lot of forest with a fast intensity of time and is expected to result in extreme climate change.

RESULTS AND DISCUSSION

History of Climate Change in the Nigeria Area

Available historical evidence suggests that climate change is not alien to the Nigerian area as evident in historical and archaeological relics pointing to this fact. One of the most significant of this evidence is as established by discovery of an ancient canoe dating back to over three thousand years (3000) located in about six hundred kilometers (600) away from the present day bank of the Lake in the Nigerian Territory (Kwanashie et al, 1988). Historians have argued that the result of the relics shows that it coincided with the period marking the beginning of the drying up of the Mega Chad. Smith (as cited in Kwanashie et al 1988), argued :

“Available historical documents have argued that the area under study, during the last 20,000 years or so, though free from tectonic movements, has been subject to sensational climate changes, and these have in turn brought about radical modification in the conditions of human life in the area, flora and fauna configuration of the region. Then after about 7,000 B.P., dramatic changes in climate appear to have begun in this region: changes which brought about not only a substantial alteration in the distribution of surface water, but also a series of revolutionary modification in the fauna and flora and consequently the conditions of human life. This process has continued down to recent time and may still be going on”

This view has been supported by recent report on the entire area by scholars, The report established thus:

“Africa's Sahara may have been 'the most dangerous place in the history of planet Earth', a palaeontological study has concluded. A team of international researchers found that what is today the famous desert region was home to 'ferocious predators' around 100 million years ago. At this time, the Sahara was a vast river system that played host to flying reptiles and crocodile-like hunters. The team reviewed fossils from a set of Cretaceous-age rocks in south-eastern Morocco referred to by experts as the 'Kem Kem Group'. They found that three of the largest predatory dinosaurs of the time lived in the Sahara at that time. These included the sabre-toothed *Carcharodontosaurus*, which was more than 26 feet (8 metres) long with enormous jaws and long serrated teeth each of which is up to 7.8 inches (20 centimetres) in length. Also living in the region was the 26 feet-long *Deltadromeus*, a member of the raptor family with long, slender hind limbs — as well as the predatory flying reptiles pterosaurs, and crocodile-like hunters. 'This was arguably the most dangerous place in the history of planet Earth,' said paper author and palaeontologist Nizar Ibrahim of the University of Portsmouth. The Sahara of 100 million years ago was 'a place where a human time-traveller would not last very long.' What did live in abundance in the region, however, was fish — on which the predators would have relied for food, paper author David Martill of the University of Portsmouth explained. 'This place was filled with absolutely enormous fish, including giant coelacanths and lungfish (Chadwick, 2020)”

The above is well supported by Archaeological findings which indict well watered and rich agricultural heritage of the area. According to lead author Sam Coatham of University of Bristol's School of Earth Sciences.

“A *Titanichthys* fossil that was found in the Sahara Desert confirmed the creature had a narrow lower jaw without the sharp edges needed for cutting. ...A giant fish that lived around 380 million years ago fed in a similar way to basking sharks, the second-largest living shark in the world today. The *Titanichthys*, from the class of pre-historic fish called the placoderm, was a suspension-feeder — it captured and ingested food particles suspended in water. The fossils also showed the creature's jaw wouldn't have supported the mechanical stresses needed to chew and bite. *Titanichthys* jaws were less resilient than those of other placoderm species that fed on large or hard-shelled prey during the so-called Devonian period — 140 million years before the first dinosaurs roamed Earth (Chadwick, 2020)”

From the account above, it is clear that the issue of climate change is actually not new to the area, what is however new is the rapidity at which it is taking place. According to experts the impact has a wide ranging effect such as direct-acting effects (e.g., heat wave-related deaths, weather disasters) or disturbances of complex ecological processes (e.g. changes in patterns of infectious diseases, in fresh water supplies, and in food production). It is in line with this that The United Nations Intergovernmental Panel on Climate Change (IPCC) in its fourth assessment report (Onwuliri, 2011), have submitted thus :

“globally the health status of millions of people is projected to be affected through, for example, increases in malnutrition; increased deaths, diseases and injury; increased burden of diarrheal diseases; increased frequency of cardio-respiratory diseases due to higher concentrations of ground-level ozone in urban areas related to climate change; and the altered spatial distribution of some infectious diseases”

It is thus clear that this changes brought about by climatic change, affects not only man but his environment, which is central to human continued existence. In this way, changes in the environment (both natural and man-made) affect his activities either to his the benefit or detriment. However, as far as the food production/security is concern the recent occurrence indicates that the nation may be heading for problem, especially owing to the level of erosion/flooding and subsequent lose of soil fertility.

Climate Change and Threat to Food Production

Agriculturalists have argued that climate and climatic conditions has a double effect on soil. Ahn (1970) opined that it has a direct influence on weathering, leaching and soil development, and it has indirect effects on soils through its influence on the nature of vegetation. From the study of the soil in the Nigerian area, Ahn (1970), argued that the impact of climate change affect it capacity to support food production adversely, due to excessive lose of soil nutrient which is necessary for bountiful production. In a more specific term, Ahn (1970) Continued thus

“Slightly to moderately leached soils may thus have lost all the more mobile elements, those which are removed in stages one and two, but retain all or most of their combined silica and sesquioxides. In extreme conditions, however, the silica is removed more than the sesquioxides. Further weathering, leaching and translocation therefore have the effect of reducing the quantity of silica in the soil and thus of causing the proportion of iron and aluminium sesquioxides left in the remaining material to increase. For this reason a very broad, general characteristic of highly weathered soils developed under hot, wet climates is a relatively high content of iron and aluminium. Soils of this broad type have often been referred to as latosols”.

All these in the opinion of the scholar takes place as a result of leaching which will occur due to heavy flood and excess water in the area over a period. In a more explicit form, Ahn (1970) wrote;

“Leaching means washing and this washing or leaching caused by a temporary excess of water percolating down through the soil profile may occur relatively seldom, perhaps only after occasional, particularly heavy flood or falls of rain or only in the wettest few weeks of the year. Through-leaching depends on whether there is at any time an excess of water which can remove weathering products in solution and suspension right out of the soil profile. Heavy concentrated rainfall in a short period is more likely to achieve this than the same amount of rain spread evenly over a longer period”

Early Warning Signs in modern Nigeria and its Impact

As noted earlier, the issue of climate change is not new, however the activities of man in the region over the years have led to a more dramatic dimension with even more devastating effect. In the case of the Nigerian area it has been established that gas flaring as well as the massive felling of trees and destruction of the vegetation is impacting negatively on the area. As it concerns the activities of flaring, Ojeh (2012), argued thus:

“The main component of flared gases includes carbon dioxide (CO₂), methane (CH₄), nitrous oxide (NO₂), water vapour and Sulphur dioxide (SO₂). The low combustion efficiency of Nigeria flare stack (60-80%) results in a large portion of the gas emitted being methane and since methane has a higher global warming potential ...The role of methane in global atmospheric changes has received increasing attention recently....Although the actual emission is estimated with a great deal of uncertainty, yet methane has a global warming potential up to 63 times to that of carbon dioxide (depending on the time horizon) and accounts for about 15% of the global warming due to anthropogenic emission”.

On the other hand, the excessive dependence on wood in the forest for fuel as well as the indiscriminate felling of trees in Nigeria has not help matters. This can be better understood when seen in the light of the position of the US Weather Service 2014, which posited thus;

“Deforestation is an important factor in global climate change. Climate change is because of a build up of carbon dioxide in our atmosphere and if we carry on cutting down the main tool we have to diminish this CO₂ build up, we can expect the climate of our planet to change dramatically over the next decades. It is estimated that more than 1.5 billion tons of carbon dioxide are released to the atmosphere due to deforestation, mainly the cutting and burning of forests, every year”.

On the need to preserve the vegetation and forest, it wrote

“Forests are vital for life, home to millions of species, they protect soil from erosion, produce oxygen, store carbon dioxide, and help control climate. Forests are also vital for us to live as they provide us with food, shelter and medicines as well as many other useful things. They also purify the air we breathe and water that we need to survive. Deforestation by humans is causing all of these necessary functions to be lessened, and hence damaging the atmosphere even further. Forests play a huge role in the carbon cycle on our planet. When forests are cut down, not only does carbon absorption cease, but also the carbon stored in the trees is released into the atmosphere as CO₂ if the wood is burned or even if it is left to rot after the deforestation process. Smaller crops e.g. plants and agricultural crops also draw in carbon dioxide and release oxygen, however forests store up to 100 times more carbon than agricultural fields of the same area. Over 30 million acres of forests and woodlands are lost every year due to deforestation; causing a massive loss of income to poor people living in remote areas who depend on the forest to survive”

Presently it is estimated that Nigeria is losing about 351,000 hectares of its landmass to desert conditions annually, and such conditions are estimated to be advancing southwards at the rate of about 0.6km per year. This is due to the indiscriminate extension of farmland, overgrazing, bush burning, cutting of trees to use for firewood and other domestic purposes, deforestation, over cultivation, poor irrigation practices, and inappropriate land use. These result to loss of biological and economic productivity of the land (Polasky et al, 2005). This was the core of the message of the Nigerian Ministry of Environment while celebrating 2014 Environment Day. The Ministry underscored the importance of intensified sensitization campaign programmes on issues of bush burning, clearing of gutters, cutting down trees, use of generators and refuse management. The ministry also discouraged the use of candles and lanterns, vehicular emission and use of dangerous chemicals.

The impact of the above is that it gradually exposed that area to erosion and other agents of flood and leaching. This situation continued such that by 2007, evidence has started manifesting in most parts of the country especially in the rural areas for detail see table 1.

Table 1. Selected States which manifested symptoms

s/no	States	Year	Effect on Agricultural Land and Manpower
1	Abia	2007	Over 20,000 persons in the six communities swept away by gully which grows at 500 meters yearly and 20,000 persons.
2	Anambra	2007	All 177 communities have erosion/flooding problems as 1,000 feet deep, 3,000 ft wide and about 30,000 – 40,000ft long gully crisscrossing Nanka, Agulu, Awgbu, Ubaha and Enugu villages. More than 1000 person and well over 4000 families lost their land
3	Borno	„	21 villages in Gwarzo L.G.A flooded, unspecified number of people killed
4	Calabar	„	Minimal
5	Delta	Uptill date	Most of the farming areas have always witnessed flooding
6	Ebonyi	2006/07	Landslides and gullies rendered many homeless
7	Edo	Till Date	Illushi and parts of Anebette area have always been flooded
8	Enugu	2006/07	Several homes, farmlands, churches and roads washed away. More than 250 families, numbering close to 1,500 rendered homeless.
9	Gombe	2004	Over 20 people died and thousand rendered homeless, asituation that has not changed much.
10	Imo	Up to 2007	Had over 34 gully erosion sites ravaging the area(as at 2007 N3 billion was set aside to combat erosion)
11	Kaduna	2003	Close to 10,000 people were reported drowned in different parts of the state in 2003. The problem of flood has not been fully combated till date.
12	Kebbi	2007	Flood rendered more than 3000 people homeless. Farms and animals lost
13	Kogi	Till Date	Areas around the River Niger have always experienced this flood leading to loss of live, farmlands and properties.
14	Lagos	Up till date	It is a yearly issue. Apart from the popular beach surge, areas like oloosa and Idi Araba in Mushin, Ilaje in Bariga, Shomolu, Orile Iganmu, Amukoko, Itire, Illasamaja, Ijeshatedo, Agbado Crossing, Ijora Badia, Isheri-Oshun, Ajegunle in Kosofe and Adeniran Ogunsanyan in Surulere as hot spots.
15	Plateau	2007	47 died in five Local government along Wase Basin, over 200 other settlements on the basin under threat.
16	Rivers	2007	Animals (piggeries and poultries) destroyed, Homes always flooded and about 350,000 hectares of farmlands affected annually
17	Sokoto	2007	Over 5000 people rendered homeless and settlements destroyed
18	Zamfara	2006	Hundreds of settlements washed away and thousands rendered homeless.

Source : processed by researchers (2020)

2012 Flood Disaster and its implication for Food Production/Security

Scholars have argued that the negative impact of the emerging climate change in the country became more evident in the colossal loss of lives and properties due to flooding in 2012. Ikelegbe (2012) posited thus :

“The 2012 rainy season in Nigeria has been worst than earlier years, and heavy heavy rains at the end of August and the beginning of September led to serious floods in most parts of the country leading to destroyed river banks. Over 3 million people are affected by floods in West Africa and central Africa this year. Out of these number, Nigeria has 1,440,986 internally displaced persons. The Integrated Regional Information networks comments that this is the worst flooding in 40 years with heavy rains submerging much of Anambra, Delta, Bayelsa, Cross Rivers, Ebonyi, Rivers, Akwa Ibom. In Bayelsa State, virtually all the communities along the river Niger such as Sagbama, Adagbabiri, Peretorugbene, Agbere, Ofni, Ayamasa, Sabagriea, Igbedi, Famgbr, Yenaka, Ogu, Fortorugbene, Aguadama-Epetiama, Oporoma, Ndoro, Tombia, Peremabiri, Elemebiri, Asamabiri, Anagalabiri, Opokuma, Odi, Kaiama, Biseni, Gbarantoru, Tombia Amassoma and Ekeremor among others were submerged”

In line with Ikelegbe’s position, Onoyeme J (2012), gave his account thus:

“Sabagriea community is over run by the over flowing Nun River. In Rivers State, communities such as Obrikom, Ebocha and Okwuzi Egbema, Kala, Opuogbogolo in Omuku and Ahoada Local Government Areas, were all ravaged by the flood and not less than 100 communities have so

farbeen taken over by flood in Rivers State. In this way the over 50% of the fish consumed in Nigeria and produced in the Niger Delta is affected”

This situation was also replicated in various parts of the country, especially the rural areas leading to loss of crops and animals. According to the National Emergency Management Agency, the flooding has destroyed about 152,575 hectares of farmland. This orchestrated hikes in foodstuff during the harvest season. The Agency continued thus:

“the challenge was two fold, First, is how the supply of foodstuff demand regions will be met considering the immature harvesting that has occurred; secondly, is that relating to the farming activities. In their view, Soils have been flooded and most top soils as well as nutrients have been leached with consequent soil impoverishment. At present, there exists a separation of farmers and their farmlands which is their main source of income and sustenance”.

As a confirmation to the National Emergency Management Agency report, Anaro & Idowu (2012) described the situation thus:

“Many farmlands that ought to be either in planting or harvesting season are now many feet under water. Germinating crops have been overtaken by water and are presumably rotting away, while soil nutrients are being flushed away. The lives of some farmers are being saved, though some were lost, their farms and investments are already laid to waste. Properties and investments may be lost, but lives are important and must be rescued”.

In line with the position of Anaro & Idowu (2012), Okogie (2012), opined that the natural disasters that befell the country due to global climate change put the food supply issue in the front burner, as apart from the production of most products, supply was also affected. It was therefore not surprising that the prices of food produce and related commodities skyrocketed. In view of the fact that supplies from states within the North-West region suggest that the South primarily relies on the North for food products, this becomes even more worrying. These areas are illustrated by indices from the Kebbi, Sokoto Zamfara, Katsina, Jigawa and Kano states as one of the main northern suppliers of assorted food products to the South. Okogie (2012), giving report on the impact of the 2012 flood disaster in Nigeria, wrote thus:

“The natural disasters that have befallen the country due to global climate change have already put the food supply issue in the front burner. If you had been out of food stock recently and had gone to some markets in Lagos and other states of the federation, you would have noticed the nominal price hike in food stock which the people have to contend. traced it to effects of climate change... the increase to heavy rainfall and flooding of their tomato farms. Prices of beans, an important source of protein, have also increased by over 100 per cent in the South”.

The above situation is reflected in the table 2.

Table 2. Market Prices of Basic Food Items in 2012 (Flood Period)

s/no	Produce	Quantity	Price (before flood) May	Price (during flood) Aug/Sept	Major Cause
1	Fresh Tomatoes	Basket	10,000	15,000-20,000	Flood
2	Fresh Pepper	Medium size basket	5,000	6,000-6,5000	Flood
3	Beans	Bag	8,000	13,000-15,000	Flood
4	Gari	Big Bowl	2,500	4500-5000	Flood
5	Yam	Tuber	150.00	300.00	Flood
6	Palm oil	10 litre	1,500.	3,500.00	Flood
7	Cassava	Basket		100% increase	Flood
8	Rice	Bag (local)		100% increase	Flood

Source: Field research conducted by author (2012)

Apart from the rise in food price of livestock was also affected, as it became difficult to transport most of these produce across the length and breadth of the country. Okogie (2012), gave account :

“There are more than 1,000 cow dealers in Gusau Town, Zamfara state, who jointly transport to the South, an average of 30,000 cows daily; ...average daily supply from Kano and other large cities like Sokoto and Maiduguri is 100 trailer-loads, while from other towns like Zaria, Kebbi, Gusau and Katsina, an average of 30,000 cows are transported daily to the South. An estimated number of 30 trucks loaded with assorted vegetable items like onions, tomatoes, pepper and other related items are supplied to the South on a weekly interval. From Gusau major types of grains like guinea corn, maize and soya beans are supplied to the South daily. These products are cultivated in the North, more than 80 per cent of them are consumed in the South, particularly soya beans, which is used as industrial raw material for the production of powder milk, cooking oil, and many other products. From Gusau, an estimated number of 50 trucks of soya beans are supplied to the South on weekly basis, while more than 200 trailers of sorghum, used in the production of beverages by industries in the South, are also transported on daily basis”.

Although the report indicates that the climate change which resulted in the losses is an international phenomena, but its impact in our part of the world has been devastating. Even areas in the far north like Kebbi, Sokoto and Maiduguri witnessed flooding which destroyed livestock and food crops. This has been confirmed by the Family Warning Systems Network (FEWSNET) which established that the food crisis conditions in Yobe and Borno and rest states in the region. Family Warning Systems Network (FEWSNET) continued thus:

“This is mainly due to the fact that in the Northern part of Nigeria, precisely Sokoto, Kebbi, Zamfara, Katsina, Yobe, Borno, Jigawa, Kano etc, the stable ecosystem of the Sahel and Sudan Savannah are already vulnerable as a result of climate change which emphasized the existing pattern of aridity and heightened the tendencies of drought, desert encroachment, depletion of mineral and land degradation. The attendant consequences are food insecurity and declined agricultural activities, as these depend on adequate rainfall and climatic elements. This condition is further accentuated by the Boko Haram (BH) insurgency that has crippled all farming”.

The above situation becomes even more devastating when considered in the light of the fact that most of these farmers borrowed from either banks and/or some other money lenders to finance their farming projects. For example, The Central Bank of Nigeria's second quarter report for 2012 revealed that N1.591 billion was granted to 13,363 farmers under the Agricultural Credit Guarantee Scheme (ACGS), from which food crop production received 75 per cent, the largest share of the funds. It also revealed that during the period a total of 12,018 food crops farmers assessed N1.192 billion under the scheme (Central Bank of Nigeria's, 2012). It was therefore not surprising that at the end of the farming period, most areas in Nigeria recorded cases of suicide among farmers. It was later revealed that this was done by those that were affected by the flood and could not harvest their produce, hence they became indebted. In some other cases affected farmers deserted their homes and families to avoid embarrassment from their creditors.

Accessible records suggest that state government had gone to different bodies to obtain loans to fix ecological problems in their states at various times in Nigeria's history. During the eight years of the country's return to democracy, for example, President Olusegun Obasanjo's administration disbursed over N150 billion to state governors, local government chairmen and the Federal Capital Territory administration to combat environmental issues (Sophia & Ogunniyi, 2016). As early as 2007, the state of Lagos had already secured \$60 million (N7.6 billion) to boost its drainage infrastructure to mitigate flooding. During the same time, the government of Anambra raised more than N2.5 billion to reduce the danger of erosion in the state, which is one of Nigeria's food producing areas. This was because the state

had no less than 1000 erosion sites, with 500 quite involved, as at that time. Likewise, in 2007, the Kebbi state government reported that it spends no less than N400 million annually on combating desertification (desertification is the major all season environmental malaise plaguing most of the northern part of the country). All these were geared towards combating environmental degradation as well as boost crop production in the states.

Table 3: Allocation and Expenditure on Ecological / Flood Control, 1992 - 2002

No	States	Amount on Ecology	Impact of flood on food production
1	Abia	307,400,000.00	Over 20,000 persons in the six communities swept away by gully which grows at 500 meters yearly.
2	Adamawa	560 million	Large span of farmland lost to flood
3	Akwa Ibom	****	Large span of farmland lost to flood
4	Anambra	1.368 billion	Large span of farmland lost to flood
5	Bauchi	863 million (no break down)	Large span of farmland lost to flood
6	Bayelsa	299.5 million	Several farm lands
7	Benue	975,000,000	Large span of farmland lost to flood
8	Borno	183,000,000(no breakdown)	Farm land loss and later heightened the tendencies of drought, desert encroachment, depletion of mineral and land degradation
9	Cross River	717228417.00	Large span of farmland
10	Delta	****	Several farm lands
11	Ebonyi	971136760.50****	Large span of farmland
12	Edo	****	Several farm lands
13	Ekiti	270069425.00	Large span of farmland lost to flood
14	Enugu	****	Several homes, farmland washed away. And more than 250 farming families rendered homeless.
15	Gombe	78,000,000****	Large span of farmland lost to flood
16	Imo	1272551810.85	Large span of farmland lost to flood
17	Jigawa	17,517,000.00	Farm land loss and later heightened the tendencies of drought, desert encroachment, depletion of mineral and land degradation
18	Kaduna	****	Close to 10,000 people were reported drowned in different parts of the state in 2003. The problem of flood has not been fully combated till date
19	Kano	466,018,625.00	Farm land loss and later heightened the tendencies of drought, desert encroachment.
20	Katsina	236,000,000.00	loss of over 146 farmlands to the floods
21	Kebbi	71750000.00	Flood rendered more than 3000 people homeless. Farms and animals lost.
22	Kogi	672 million*	Loss of over 152,575 community farms
23	Kwara	572 million**	Large span of farmland lost to flood
24	Lagos	6,393,981,108.00**	Large span of farmland lost to flood
25	Nasarawa	258,500,000.00	Large span of farmland lost to flood
26	Niger	692,116,946.00	500 communities (over 663,000 persons displaced)
27	Ogun	34.7 million***	Large span of farmland lost to flood
28	Ondo	358,092,2035	Large span of farmland lost to flood
29	Osun	****	Large span of farmland lost to flood
30	Oyo	****	Large span of farmland lost to flood
31	Plateau	1176.686 billion*	over 200 settlements and farm lands on the basin under threat.
32	Rivers	321 million	about 350,000 hectares of farmlands lost, Animals (piggeries and poultries) destroyed,
33	Sokoto	495,150,000.00	Farm land loss and later heightened the tendencies of drought, desert encroachment, depletion of mineral and land degradation
34	Taraba	****	Large span of farmland
35	Yobe	****	Farm land loss and later heightened the tendencies of drought, desert encroachment.
36	Zamfara	****	Same as above
	FCT Abuja	111,300,000.00*	

Key;* - This stands for projects, whose amount were not stated; ******** - Represents unavailability of figures for such project.

Source: Abu & Obe (2012), Anaro & Idow (2012) and Chukwuma et al (2012)

From the above table 3, it is clear that although the disaster had shown early signs and symptoms, but the authorities never took the situation seriously. It is therefore not surprising that instead of accepting blames and facing the situation squarely, government have turned to propaganda which seems to place the blame at the feet of the masses. This was clearly stated in the message of the Minister of Environment ahead of the 2014 World Environment Day (WED) celebration, in which the minister urged Nigerians to make extensive use of the social media to create the desired awareness on challenges to the environment. "Especially, the need to refrain from critical actions and activities that will or likely lead to the ozone layer depletion, melting of the arctic region, increased rainfall and rising sea levels. In her opinion the major problem was issues of bush burning, clearing of gutters, cutting down trees, use of generators and refuse management. Others are use of candles and lanterns, vehicular emission and use of dangerous chemicals. These are certainly issues which could be avoided if the government lives up to its responsibility by providing the basic necessities of life.

Determination

Although the issue of climate change can be said to be an international phenomenon, people in various parts of the world can adopt various strategies to overcome these threats. In the case of Nigeria as in most of the surrounding countries, it has been established that, most of the problems associated with it are man-made (mostly due to human damage to ecosystems for survival). Agriculture accounts for about 10-12% of global greenhouse gas emissions. By transitioning to low-carbon farming techniques, farmers and those in related agricultural field can not only reduce emissions, but also increase profit and yield for farmers. In this way, the emphasis is on the elimination of agricultural practices which lead to high release of carbon. For example, Rice feeds the world, providing to humans than any other food, and more than a billion people depend on rice cultivation for their livelihoods. However, it is been rice farming releases greenhouse gasses more potent than carbon. According Kritee (2013), when organic material decays without oxygen, as it does in water-logged rice paddies, soil microbes generate methane, a greenhouse gas with 25 times more warming potential than CO₂. In India, rice methane emission account for about 10% of the nation's total greenhouse gas (GHG) emissions.

CONCLUSION

Experts have realized the importance of forests as an antidote to climate change. This is because it has been determined that Deforestation causes 12-18 percent of the world's carbon emissions, almost the same as all CO₂ emissions from the global transportation sector. Forests are home to 80% of all terrestrial biodiversity. However, we were losing the forest at a very high rate. Every year more than 13 million hectares (32 million acres) of forest are lost, an area roughly the size of the UK and humans who have the biggest role but the accelerated reduction in forest capacity, although experts are aware of this, there is still a lack of monitoring on the ground.

we suggest there is a need for the government to put in place an original regulatory agency that will examine indiscriminate land use especially with regard to contraction and extraction. Because, through this uncoordinated and haphazard exercise, there are emissions of harmful gases into the atmosphere. For example, research shows that small-scale gold mining and coal burning are major sources of anthropogenic emissions of mercury into the air. This also shows that artisanal and small-scale gold mining (ASGM) and coal burning are the largest components of anthropogenic emissions, followed by

ferrous and non-ferrous metal production, and cement production. Annual emissions from ASGM are estimated at 727 tonnes, making it the largest sector that accounts for more than 35% of total anthropogenic emissions. Large amounts of coal are burned around the world to generate electricity, to run industrial plants, and for heating and home cooking. Coal burning emitted about 475 tonnes of mercury in 2010, mostly from electricity generation and industrial use.

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HAK DIPILIH BAGI PENYANDANG DISABILITAS UNTUK MENJADI PRESIDEN DI HUBUNGKAN DENGAN SYARAT MAMPU SECARA JASMANI DAN ROHANI DI INDONESIA

SELECTED RIGHTS FOR PERSONS WITH DISABILITIES TO BECOME PRESIDENT ASSOCIATED WITH LEGAL AND SPIRITUAL ABILITY CONDITIONS IN INDONESIA

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Abstract

Social rights for people with disability need to be protected, including political rights. The operationally political rights consist the right of choice and the right to be elected. The issue arises when people with disability have to face the term of physical and spiritual requirements for president, though neither are not entirely contradiction but technically the implementation of the health physically requirement threatens people with disability to be president. The study aims to explain the legal certainty of people with disability to be president linked to physical and spiritual requirement. This research aims to know physical and spiritual rule and limitations. This research uses normative juridical methods and analysis presented descriptively. This research uses conceptual approach, legal approach, and historical approach. The conclusion of this research is that there is no certainty for people with disability to be president until the government has the implementation which is regulate and affirm people with disability to pass the physical health and spiritual health requirements. The arrangement of formulation physical and spiritual health was conducted by medical check up by the doctors team and decision made thorough them using medical approach and missed the social approach. While there is no clarity about the limits of form capable in physically and spiritual health to be president linked to people with disability as the extent of spectrum of ability.

Keywords: Disability, Inclusive, Political Right, Physical and spiritual health requirements for become a president

Abstrak

Hak-hak sosial penyandang disabilitas perlu untuk dilindungi termasuk mengenai hak politik. Secara operasional hak politik meliputi hak memilih dan dipilih. Persoalan muncul ketika hak dipilih bagi penyandang disabilitas dihubungkan dengan syarat mampu secara jasmani dan rohani. Walaupun hak dipilih bagi penyandang disabilitas dan persyaratan mampu secara jasmani dan rohani tidak sepenuhnya bersinggungan, akan tetapi secara teknis, pelaksanaan ketentuan syarat mampu secara jasmani dan rohani sangat mengancam hak dipilih penyandang disabilitas untuk menjadi presiden. Penelitian ini bertujuan untuk mengetahui kepastian hukum hak dipilih untuk menjadi presiden bagi penyandang disabilitas dihubungkan dengan persyaratan mampu secara jasmani dan rohani serta untuk mengetahui pengaturan dan batasan mampu secara jasmani dan rohani itu. Penelitian ini menggunakan metode yuridis normatif dan analisis disajikan secara deskriptif. Pendekatan yang digunakan adalah pendekatan konseptual, pendekatan perundang-undangan, pendekatan historis. Kesimpulan dari penelitian ini adalah bahwa tidak ada kepastian terhadap hak dipilih bagi penyandang disabilitas untuk menjadi presiden sepanjang tidak adanya peraturan pelaksanaan yang mengatur secara khusus yang juga mengafirmasi penyandang disabilitas dari ketentuan syarat mampu secara jasmani dan rohani. Pengaturan ketentuan mampu secara jasmani dan rohani dilakukan dengan pemeriksaan kesehatan menyeluruh oleh tim dokter lalu keputusan diambil dengan rapat pleno oleh tim dokter dengan menggunakan pendekatan medis dan

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melewatkan pendekatan sosial. Sedangkan tidak ada kejelasan mengenai batasan ketentuan mampu secara jasmani dan rohani karena untuk menjadi presiden dihubungkan dengan penyandang disabilitas karena luasnya spektrum kemampuan.

Kata kunci: Disabilitas, Inklusif, Hak Politik, Syarat jasmani dan rohani bagi presiden

PENDAHULUAN

Perjuangan pergerakan atas persamaan hak penyandang disabilitas di Indonesia telah sampai pada saat-saat berbahagia dengan hadirnya Undang-undang No. 8 Tahun 2016 tentang Penyandang Disabilitas yang telah mengakomodasi hak-hak sosial penyandang disabilitas termasuk hak untuk menjadi Presiden (Priamsari, 2019). Namun hak dipilih penyandang disabilitas masih dipertanyakan terkait adanya syarat mampu secara jasmani dan rohani bagi calon presiden (Zainal & Iqbal, 2018). Syarat sehat jasmani dan rohani sebenarnya adalah syarat yang berlaku umum oleh karena itu, dalam wacana yang berkenaan dengan syarat presiden, hampir tidak ada lagi yang mempersoalkannya, karena akan dengan sendirinya kemampuan jasmani dan rohani diakui oleh para pemilih dalam prakteknya nanti sehingga tidak perlu dimuat dalam peraturan perundang-undangan yang berbasis persamaan. Mahfud MD berpendapat bahwa adalah diskriminasi terhadap penyandang disabilitas bila masih ada ketentuan sehat jasmani dan rohani bagi calon presiden (Iqbal, 2016).

Peraturan dengan basis persamaan tidak bisa ditentukan nilainya berdasarkan disabilitas dan non disabilitas karena hal itu merupakan tindakan diskriminasi. Pasal 5 UU NO. 7 Tahun 2017 tentang Pemilu menyebutkan bahwa penyandang disabilitas yang memenuhi syarat mempunyai kesempatan yang sama sebagai calon Presiden/Wakil Presiden, hal ini telah sesuai dengan prinsip kesamaan kesempatan (Fattah, 2013). Akan tetapi disisi lain, penyandang disabilitas harus memenuhi persyaratan mampu secara jasmani dan rohani. Hak dipilih untuk menjadi presiden bagi penyandang disabilitas dan persyaratan mampu secara jasmani dan rohani merupakan suatu kontradiksi, walaupun secara materi tidak sepenuhnya bersinggungan, akan tetapi dalam pelaksanaan formal aturan jasmani dan rohani jelas terjadi kontradiksi karena aturan sehat jasmani dan rohani menempatkan disabilitas sebagai faktor penentu lolos atau tidak lolosnya bakal calon presiden.

Menurut KBBI penyandang berarti orang yang menderita sesuatu, orang yang mempunyai suatu gelar. Kemudian disabilitas, kata ini berasal dari bahasa Inggris yaitu *disabilities* yang artinya keadaan seperti sakit atau cedera. Pergantian istilah penyandang cacat menjadi istilah penyandang disabilitas dilakukan setelah Indonesia menandatangani *Convention on the Rights of Persons with Disability* (CRPD) pada 3 Maret 2007. Sebagai pihak yang menandatangani konvensi, Indonesia juga memiliki kewajiban untuk mengikat diri dengan meratifikasi konvensi tersebut. Adapun secara istilah, Penyandang disabilitas adalah setiap orang yang mempunyai kelainan fisik dan/atau mental yang dapat mengganggu atau merupakan rintangan dan hambatan baginya untuk melakukan kegiatan secara layak (Pawestri, 2017).

Isu disabilitas ini merupakan isu penting. Jika dibandingkan, peluang kita menemukan seorang penyandang disabilitas di luar sana lebih besar daripada kaum minoritas lainnya. Berdasarkan Survey Penduduk Antar Sensus (SUPAS) 2015 sebanyak 39.5.157 orang di Indonesia adalah penyandang disabilitas (Ashar, 2019). Jumlah ini bisa saja meningkat seiring bertambahnya waktu, hal ini dikarenakan kedisabilitasan bisa menerpa semua kalangan. Oleh karenanya penting pemerintah untuk mengatur kebijakan yang membuat para penyandang disabilitas ini tetap hidup dalam masyarakat dan bernegara termasuk kebijakan mengenai hak dipilih bagi penyandang disabilitas untuk menjadi presiden dihubungkan dengan syarat mampu secara jasmani dan rohani (Rahmanto, 2019).

Penelitian lebih mendalam pun telah dilakukan oleh Vivaldy (2019) yang membahas tentang hubungan syarat mampu secara jasmani dan rohani dalam UUD 1945 pasal 6 ayat (1) terkait dengan penyandang disabilitas selain itu penelitiannya juga membahas berhak atau tidaknya penyandang disabilitas menjadi presiden dan wakil presiden. Kemudian ada tulisan dari Salim (2018) yang membahas tentang mengukur kemampuan jasmani dan rohani kandidat dalam pemilihan umum maupun pemilihan kepala daerah serta menjelaskan kekeliruan KPU dalam memaknai kemampuan jasmani dan rohani dari sudut pandang penyandang disabilitas. Kemudian ada Resa Hendi Prasetya (2018) membahas hak penyandang disabilitas untuk dipilih yang tertera dalam Undang-undang No. 7 tahun 2017 tentang Pemilu dengan menggunakan *fiqh siyasah* sebagai tinjauan. Berbeda dengan tulisan-tulisan sebelumnya, penelitian ini membahas kepastian hukum hak dipilih penyandang disabilitas serta pengaturan dan batasan ketentuan mampu secara jasmani dan rohani sehingga yang menjadi fokus adalah kepastian hukum karena hukum tanpa kepastian hanyalah angan-angan belaka. Selain menggunakan pendekatan konseptual dan perundang-undangan, penelitian ini juga menggunakan pendekatan historis sehingga pembahasannya lebih mendalam.

Indonesia merupakan Negara hukum untuk itu sangat penting dilakukannya penelitian tentang peraturan ini agar disuatu hari tidak membuat perdebatan yang lebih luas bagi para calon Presiden. Agar pembahasan tidak melebar, maka disusun rumusan masalah sebagai berikut: Bagaimana kepastian hukum hak dipilih penyandang disabilitas untuk menjadi presiden dihubungkan dengan syarat mampu secara jasmani dan rohani di Indonesia? Bagaimana pengaturan dan batasan mampu secara jasmani dan rohani dihubungkan dengan hak politik penyandang disabilitas?

METODE PENELITIAN

Tulisan ini adalah hasil penelitian dengan menggunakan metode yuridis normatif yang disajikan secara deskriptif analitis (Sugiyono, 2015). Pendekatan yang digunakan untuk menelaah isu hak dipilih penyandang disabilitas dan hubungannya dengan syarat mampu secara jasmani dan rohani adalah pendekatan konseptual yaitu dengan menelaah teori-teori seputar isu yang dihadapi lalu ditelaah menggunakan asas dan doktrin dalam ilmu hukum. Untuk menopang usaha penelitian ini maka digunakan juga pendekatan perundang-undangan dan pendekatan historis (Lewenson & McAllister, 2015). Objek dari penelitian ini adalah aturan hukum yang berlaku di negara Indonesia yang menyatakan bawah seseorang yang ingin mencalonkan dirinya sebagai Presiden haruslah dalam kondisi sehat Jasmani dan Rohani. Data – data yang didapat akan dipilah dan di analisis menggunakan tehnik triangulasi untuk menemukan data yang benar – benar diyakini kebenarannya.

HASIL DAN PEMBAHASAN

Dalam rangka mencari kepastian hukum mengenai persoalan hak dipilih bagi penyandang disabilitas untuk menjadi presiden dihubungkan dengan persyaratan mampu secara jasmani dan rohani, maka akan terlebih dahulu dibahas mengenai kerangka hukum hak dipilih bagi penyandang disabilitas untuk menjadi presiden dan kerangka hukum ketentuan mampu secara jasmani dan rohani bagi calon presiden . Kerangka hukum yang dimaksud adalah hukum yang terdiri dari peraturan perundang-undangan yang telah diresmikan oleh negara, dengan menelusuri kerangka hukum tersebut akan dapat diketahui kepastian hukum dan kemungkinan kontradiksi antara aturan mampu secara jasmani dan rohani dengan hak dipilih bagi penyandang disabilitas untuk menjadi presiden (Susilo, 2011). Tabel 1

merupakan kerangka hukum ketentuan syarat mampu jasmani dan rohani disandingkan dengan hak dipilih bagi penyandang disabilitas untuk menjadi presiden :

Tabel 1. Kerangka Hukum Persyaratan Jasmani dan Rohani bagi Presiden Dihubungkan dengan Penyandang Disabilitas

UU dan Peraturan	Persyaratan Mampu Secara Jasmani dan Rohani bagi calon Presiden	Hak dipilih bagi Penyandang Disabilitas untuk Menjadi Presiden
Undang-Undang Dasar 1945	Pasal 6 ayat (1): Calon presiden dan calon wakil presiden harus mampu secara jasmani dan rohani untuk melaksanakan tugas dan kewajiban sebagai Presiden dan atau Wakil Presiden.	<p>Pasal 28H ayat (2): "Setiap orang berhak mendapat kemudahan dan perlakuan khusus untuk memperoleh kesempatan dan manfaat yang sama guna mencapai persamaan dan keadilan."</p> <p>Pasal 28I ayat (2): Setiap orang berhak bebas dari perlakuan diskriminatif atas dasar apapun."</p> <p>Pasal 6 ayat (1): "Calon Presiden dan calon wakil presiden harus seorang warga negara Indonesia sejak kelahirannya dan tidak pernah menerima kewarganegaraan lain karena kehendaknya sendiri, tidak pernah mengkhianati negara dll.</p>
Undang-Undang	Pasal 227 huruf (c) UU No. 7 Tahun 2017: Pendaftaran Bakal pasangan Calon Presiden dan Wakil Presiden dilengkapi dengan persyaratan surat keterangan kesehatan dari rumah sakit Pemerintah yang ditunjuk oleh KPU;	<p>Pasal 13 huruf (a) UU No. 8 Tahun 2016: "Hak Politik penyandang disabilitas meliputi hak memilih dan dipilih."</p> <p>Pasal 76 UU No. 8 Tahun 2016 : "Penyandang disabilitas berhak menduduki jabatan publik"</p> <p>Pasal 5 UU No. 7 Tahun 2017: "Penyandang disabilitas yang memenuhi syarat mempunyai kesempatan yang sama sebagai calon Presiden."</p>
Peraturan Komisi Pemilihan Umum	<p>Pasal 9 Ayat (1) huruf (e) PKPU No. 22 Tahun 2018: "Syarat untuk menjadi calon presiden dan calon wakil presiden adalah mampu secara rohani dan jasmani untuk melaksanakan tugas dan kewajiban sebagai presiden berdasarkan hasil pemeriksaan kesehatan menyeluruh dari tim dokter yang terdiri dari dokter."</p> <p>Pasal 29 ayat 2 PKPU No 22 Tahun 2018: "Kesimpulan hasil pemeriksaan kesehatan dituangkan kedalam berita acara yang ditandatangani oleh ketua tim pemeriksa kesehatan yang isinya menyatakan calon mampu atau tidak mampu secara jasmani dan rohani"</p>	<p>Pasal 9 ayat (4) dan (5) PKPU No. 22 Tahun 2018: "Persyaratan mampu secara rohani dan jasmani tidak dimaksudkan untuk membatasi hak politik warga negara dengan disabilitas yang memiliki kemampuan untuk melakukan tugasnya sebagai Presiden dan wakil Presiden; Disabilitas yang dimaksud tidak termasuk gangguan kesehatan."</p>
Keputusan Komisi Pemilihan Umum	<p>Keputusan KPU No. 14/PL.2.2-Kpt/06/KPU/VIII/2018: Petunjuk Teknis Pemeriksaan Kemampuan jasmani dan rohani.</p> <p>KPU tidak mengeluarkan keputusan penetapan calon kepada bakal calon yang tidak memenuhi syarat mampu secara jasmani dan rohani</p>	Tidak ada

Sumber : Diolah Peneliti 2020

Berdasarkan tabel 1 dapat diketahui bahwa tidak ada aturan pelaksanaan yang lebih mendetail dan juga bersifat afirmatif terhadap hak dipilih bagi penyandang disabilitas padahal peraturan itu harus dipandang dari sisi formalnya atau sisi pengaplikasian. Di sisi lain aturan persyaratan mampu secara jasmani dan rohani diatur dengan lebih detail sehingga terjadi ketidakseimbangan antara kedua norma tersebut.

Di Indonesia, terpilihnya Abdurrahman Wahid sebagai Presiden Republik Indonesia menjadi bukti bahwa kondisi fisik bukanlah syarat yang dijadikan syarat utama seorang pemimpin. Sayangnya, Presiden Abdurrahman Wahid tidak berhasil menduduki jabatannya selama satu periode penuh, sehingga hal tersebut belum bisa dijadikan preseden yang mematahkan bahwa disabilitas tidak dapat dijadikan lagi sebagai alasan seseorang untuk memimpin suatu jabatan publik. Gusdur (nama panggilan Abdurrahman Wahid) sempat mencalonkan diri lagi untuk menjadi presiden, namun ia ditolak oleh KPU RI karena tidak memenuhi syarat jasmani dan rohani (Barhanan, 2020). Hal tersebut adalah sejarah kelam hukum di Indonesia yang memiliki sifat diskriminatif kepada penyandang disabilitas. Hal yang perlu menjadi perhatian juga adalah bahwa perlakuan diskriminasi atas dasar hukum terhadap Gusdur justru terjadi setelah adanya amandemen UUD 1945. Sebelum amandemen UUD 1945 tidak ada pasal maupun dalam penjelasannya yang mempersyaratkan sehat jasmani dan rohani bagi calon Presiden. Syarat sehat jasmani dan rohani bagi calon presiden baru ada setelah dilakukannya amandemen ketiga yang berlangsung pada 1-9 November 2017. Atas dasar kerangka pikir tersebut bahwa syarat mampu secara jasmani dan rohani bukanlah substansi dari Undang-undang Dasar.

Sejarah kemudian mencatat fakta historis yang terjadi di beberapa negara di masa modern ini juga membuktikan bahwa yang tidak atau kurang sehat secara fisik ternyata sukses menjalankan tugasnya sebagai presiden. Beberapa contohnya adalah Mantan presiden Amerika, John Fitzgerald Kennedy (JFK) yang menderita gangguan tulang belakang sehingga harus menggunakan penyangga tulang belakang ketika menjadi presiden. Mantan presiden Amerika Ronald Reagan yang menjadi presiden dalam usia 70 tahun hampir tidak bisa mendengar sehingga harus menggunakan alat bantu dengar. Presiden Franklin Delano Roosevelt (FDR) sudah menderita polio sejak tahun 1921, tepatnya sebelas tahun sebelum ia dipilih sebagai presiden Amerika Serikat, dalam catatannya mantan presiden Amerika itu terbukti sukses memerintah di kursi roda. Selain di Amerika Serikat, juga tercatat Violeta Chamorro presiden wanita dari Nikaragua yang invalid, tetapi mampu memimpin negaranya selepas kekuasaan rezim komunis Sandinista (Iqbal, 2016).

Dasar hukum hak dipilih penyandang disabilitas di Indonesia adalah pasal 76 UU No. 8 Tahun 2016 tentang Penyandang Disabilitas berbunyi : "Penyandang disabilitas berhak menduduki jabatan publik". Undang-undang ini juga menyebutkan bahwa Pemerintah termasuk didalamnya adalah KPU untuk melindungi hak Penyandang Disabilitas dalam mencalonkan diri dalam pemilihan serta menyediakan akses dan akomodasi demi terlindunginya hak dipilih penyandang disabilitas.

Amanah untuk melindungi hak dipilih bagi penyandang disabilitas dalam UU No. 8 Tahun 2016 tidak ditindaklanjuti dengan peraturan pelaksanaan yang padahal hak penyandang disabilitas untuk dipilih dalam jabatan publik ini rentan akan perlakuan diskriminasi terutama jika dihubungkan dengan syarat mampu secara jasmani dan rohani. Diskriminasi yang dimaksud terjadi dalam bentuk persepsi sosial maupun dalam bentuk kebijakan bahkan ada juga yang berbentuk norma hukum yang diskriminatif. Hak sosial penyandang disabilitas kerap kali diabaikan atas dasar ketentuan sehat jasmani dan rohani termasuk pula hak dipilih dalam jabatan publik.

Sebelum adanya Undang-undang No. 8 Tahun 2016 tentang Penyandang Disabilitas setidaknya ada dua kasus yang mengangkat isu hukum hak dipilih bagi penyandang disabilitas dan persyaratan mampu

secara jasmani dan rohani dalam bentuk *judicial review* di Mahkamah Konstitusi dengan membenturkannya dengan Hak Asasi Manusia. *Pertama*, pengujian pasal yang memuat syarat mampu secara jasmani dan rohani dalam undang-undang pemilu presiden dan wakil presiden yang diajukan oleh Gusdur. *Kedua*, pengujian pasal yang memuat syarat mampu secara jasmani dan rohani berdasarkan hasil pemeriksaan menyeluruh dari tim dokter dalam undang-undang pilkada yang diajukan oleh Khaerul Efendi (bupati Belitung Timur periode 27-21).

Mahkamah dalam pertimbangannya terhadap dua permohonan diatas berpendapat bahwa syarat jasmani dan rohani dalam UU tentang Pemilu merupakan pengulangan redaksional belaka dari pasal 6 ayat 1 UUD RI 1945 (Putusan MKRI Perkara No. 8/PUU-II/24). Bahwa berdasarkan Putusan MKRI Perkara No. 8/PUU-II/24 syarat jasmani dan rohani tidak dipandang diskriminatif karena warga negara yang terpilih sebagai presiden dan wakil presiden harus memenuhi persyaratan tersebut agar kelak mampu secara rohani dan jasmani melaksanakan tugas dan kewajiban kenegaraan. Kemudian untuk kasus kedua, Mahkamah berpendapat bahwasanya adanya syarat jasmani dan rohani adalah hal yang wajar untuk pejabat negara, bahkan syarat tersebut berlaku juga bagi calon presiden. Mahkamah juga berpendapat bahwa penentuan kesehatan jasmani dan rohani memang seharusnya diserahkan kepada ahli dalam bidangnya dalam hal ini adalah pemeriksaan oleh tim dokter. Menurut Mahkamah, implementasi ketentuan syarat jasmani dan rohani bukan masalah konstitusionalitas.

Dari pertimbangan mahkamah konstitusi terhadap dua kasus diatas, dapat kita ketahui bahwa hak dipilih bagi penyandang disabilitas dan syarat mampu secara jasmani dan rohani tidak sepenuhnya bersinggungan akan tetapi dalam prakteknyalah terjadi kontradiksi karena dengan adanya fakta dua kasus tersebut diatas, maka otomatis ketentuan sehat jasmani dan rohani bersifat diskriminatif bagi penyandang disabilitas karena pada kenyataannya bahwa bakal calon dinyatakan gugur atas dasar disabilitas adalah perlakuan diskriminasi merujuk pada pasal 1 ayat 3 UU No. 8 Tahun 216 tentang Penyandang Disabilitas.

Atas dasar kerangka pikir tersebut maka terdapat dua kemungkinan, yaitu terjadi kontradiksi antar pasal maupun pelaksanaannya atau telah terjadi salah penafsiran. Istilah mampu secara jasmani dan rohani apabila kita samakan dengan istilah sehat adalah istilah umum karena apa yang dirasakan sehat bagi seseorang bisa saja tidak dirasakan sehat bagi orang lain, hal ini terjadi karena perbedaan persepsi begitu pula dengan istilah penyandang disabilitas yang merupakan istilah umum karena penyandang disabilitas ada beberapa jenis dan keragamannya, maka dari itu pengujian permasalahan syarat mampu secara jasmani dan rohani bertentangan dengan hak dipilih bagi penyandang disabilitas lewat *judicial review* di Mahkamah konstitusi tidak efektif karena luasnya istilah tersebut. Salah penafsiran bisa terjadi ketika para pembuat kebijakan tidak melakukan harmonisasi peraturan perundang-undangan terutama dengan UU No. 8 Tahun 216 tentang Penyandang disabilitas yang berimplikasi pada lahirnya kebijakan yang diskriminatif terhadap penyandang disabilitas.

Isu kontradiksi atau salah penafsiran terhadap hak dipilih penyandang disabilitas dihubungkan dengan syarat mampu secara jasmani dan rohani terjadi karena perancang peraturan memakai istilah yang multitafsir (*ambiguity*). Menurut Satjipto Rahardjo, multitafsir (*ambiguity*) disebabkan oleh perumusan secara *open texture* yakni kata-kata yang digunakan terlalu umum. Sehingga menimbulkan perbedaan persepsi dalam penerapannya (Satjipto, 2006). Hal tersebut berimplikasi pada tidak adanya kepastian hukum bagi penyandang disabilitas untuk menjadi presiden sepanjang tidak adanya peraturan pelaksana yang bersifat khusus untuk penyandang disabilitas yang mengesampingkan persyaratan mampu secara jasmani dan rohani.

Pengaturan dan Batasan Ketentuan Mampu Secara Jasmani dan Rohani

Pengaturan tentang penyelenggaraan pemilihan umum dilakukan oleh KPU (Komisi Pemilihan Umum) sebagai suatu lembaga negara yang mempunyai tugas, wewenang, dan kewajiban untuk menyusun dan menetapkan pedoman yang bersifat teknis untuk tiap-tiap tahapan pemilu berdasarkan peraturan perundang-undangan sesuai amanah pasal 8 Undang-undang No. 22 Tahun 27 tentang Penyelenggaraan Pemilihan Umum. Berdasarkan hal tersebut pelaksanaan atas ketentuan mampu secara jasmani dan rohani termasuk segala hal tentang pencalonan diatur oleh KPU melalui peraturan dan keputusan.

Ketentuan syarat mampu secara jasmani dan rohani berdasarkan pasal 9 ayat 1 huruf (e) Peraturan KPU RI Nomor 22 Tahun 2018 tentang Pencalonan Peserta Pemilihan Umum Presiden dan Wakil Presiden dilaksanakan dengan proses pemeriksaan kesehatan secara menyeluruh oleh tim dokter yang terdiri dari dokter. Pengaturan lebih lanjut mengenai tata cara yang bersifat teknis sebagai pedoman bagi para dokter diatur dalam Keputusan Komisi Pemilihan Umum Republik Indonesia No. 14/PL.2.2-Kpt/6/KPU/VIII/2018 tentang Panduan Teknis Penilaian Kemampuan Rohani dan Jasmani Bakal Calon Presiden dan Wakil Presiden Republik Indonesia dalam Pemilihan Umum Tahun 2019. Apabila kita melihat pengaturan dalam bentuk peraturan yang dikeluarkan oleh KPU termasuk dari periode-periode sebelumnya tidak terdapat perubahan yang signifikan mengenai ketentuan mampu secara jasmani dan rohani kecuali di pemilu 2019 terdapat pasal yang memuat bahwa persyaratan mampu secara jasmani dan rohani secara filosofis tidak bermaksud atau bertujuan untuk membatasi hak dipilih warga negara penyandang disabilitas yang memiliki kemampuan untuk melakukan tugas sebagai presiden. Selain itu, terdapat juga pasal yang mengatakan bahwa disabilitas tidak termasuk gangguan kesehatan. Hal tersebut merupakan afirmasi atau suatu kemajuan hukum yang adil bagi warga negara yang memiliki keterbatasan. Namun kedua pasal yang afirmatif itu harus disertai peraturan pelaksanaan yang lebih detail (Nasir, 2020), karena selama peraturan pelaksanaannya belum ada maka implementasi akan menjadi tidak menentu.

Hal yang paling krusial dalam implementasi ketentuan syarat mampu secara jasmani dan rohani terdapat dalam keputusan KPU mengenai pedoman teknis penilaian kemampuan rohani dan jasmani bagi calon presiden. Dalam pedoman teknis tersebut secara konsep tidak berbeda dari pedoman pemeriksaan terdahulu yang bersifat diskriminatif, hanya saja kali ini redaksi disabilitas diganti dengan redaksi ketidakmampuan namun secara konsep tidak ada perubahan substansial. Secara konsep pedoman yang termuat dalam keputusan KPU mengarah pada gugurnya bakal calon presiden yang menyandang disabilitas yaitu dengan mengukur kemampuan bakal calon presiden menggunakan pendekatan medis lalu kemudian menggolongkan bakal calon menjadi dua kategori yaitu mampu atau tidak mampu. Penilaian mampu atau tidak mampu dilakukan dalam rapat pleno Tim Penilaian Kesehatan oleh dokter.

Dokter sebagai ahli dibidang medis tentu akan menilai kondisi mampu atau tidak mampu sesuai dengan bukti kondisi jasmani dan rohani bakal calon presiden. Hal tersebut tentu akan merugikan penyandang disabilitas karena disabilitas adalah kondisi seperti sakit atau cedera sehingga akan sulit melihat perbedaannya apabila hanya dilihat dari segi fungsi jasmani dan rohani melalui pendekatan medis saja (Halalia, 2020). Sebagai contoh seorang tuna netra, tuli, dan tuna wicara kemampuannya tidak ditentukan oleh fungsi jasmani saja, akan tetapi mereka mampu dengan cara yang berbeda seperti menggunakan huruf braile, bahasa isyarat indonesia, alat bantu dengar, jalur pemandu, dan akomodasi lainnya. Penilaian kemampuan jasmani dan rohani dalam Keputusan KPU No. 14/PL.2.2-Kpt/6/KPU/VIII/2018 tidak efektif untuk (Nasution & Marwandianto, 2019) mengukur kemampuan

jasmani dan rohani bakal calon karena tidak adanya batasan yang jelas mengenai tingkat kemampuan ataupun tingkat disabilitas.

Kemudian dari pada itu, syarat mampu secara jasmani dan rohani tersebut sulit ditetapkan karena luasnya spektrum ‘kemampuan’. Selain itu ada pula jarak keterkaitan antara kemampuan dan pemeriksaan kesehatan (Vivaldy, 2019). Dalam pasal 27 Peraturan KPU No. 22 Tahun 2018 tentang Pencalonan Peserta Pemilihan Umum Presiden dan Wakil Presiden disebutkan bahwa ketentuan mampu secara jasmani dan rohani dilakukan dengan pemeriksaan kesehatan. Dalam konteks hukum, menurut Henry P. Penggabean yang dikatakan mampu yaitu mampu melakukan perbuatan hukum. Kemampuan bertindak dapat didefinisikan sebagai kemungkinan untuk melakukan perbuatan hukum di mana orang itu terikat secara tidak dapat diganggu gugat (Penggabean & Alasan, 2001). Seseorang (subjek hukum) dianggap telah cakap bertindak untuk melakukan perbuatan hukum apabila dirinya telah dewasa, sehat pikirannya dan jiwanya, tidak berada di bawah kekuasaan orang lain serta tidak dilarang oleh peraturan perundang-undangan untuk melakukan perbuatan hukum tertentu, maka dapat disimpulkan bahwa kecakapan hukum merupakan syarat umum bagi seseorang untuk dapat melakukan suatu perbuatan hukum (Vivaldy, 2019). Dari sini dapat dilihat bahwasanya mampu atau kemampuan presiden tidak relevan apabila diukur dengan pemeriksaan kesehatan.

SIMPULAN

Tidak ada kepastian hukum mengenai hak dipilih bagi penyandang disabilitas untuk menjadi presiden di Indonesia sepanjang tidak adanya aturan yang secara khusus mengafirmasi hak dipilih bagi penyandang disabilitas dihubungkan dengan persyaratan mampu secara jasmani dan rohani. Pengaturan mengenai ketentuan mampu secara jasmani dan rohani dilakukan dengan penilaian kesehatan jasmani dan rohani oleh tim dokter yang terdiri dari dokter dengan menggunakan pendekatan medis dan melewatkan pendekatan sosial. Bakal calon presiden digolongkan menjadi dua kategori dalam sebuah rapat pleno yaitu mampu atau tidak mampu berdasarkan pemeriksaan fungsi jasmani dan fungsi rohani melalui pendekatan kedokteran. Tidak ada batasan yang jelas yang menjadi tolak ukur kemampuan jasmani dan rohani apabila dihubungkan dengan penyandang disabilitas. Pemeriksaan yang hanya mengukur fungsi jasmani dan rohani hanya akan mengeliminasi bakal calon yang menyandang disabilitas. Disarankan KPU RI agar membuat peraturan pelaksanaan mengenai ketentuan penilaian mampu secara jasmani dan rohani yang bersifat khusus bagi bakal calon presiden yang menyandang disabilitas.

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