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The or U Varen Iwa (Blacksmith) and the or U Gban Agbe (Hoe Handle Maker) as Agricultural Technologists Among the Tiv: Issues in Africa's Technological Development

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The or U Varen Iwa (Blacksmith) and the or U Gban Agbe (Hoe Handle Maker) as Agricultural Technologists Among the Tiv: Issues in Africa's Technological Development

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1. INTRODUCTION

The Tiv are traditionally agriculturalists who engage in farming activities to earn a living. They produce a variety of crops for food and for sale (food and cash crops). Makar (1994:14) subscribes to this view when he stated that the Tiv economy consisted mostly of farming, hunting, fishing, livestock rearing and domestic industries such as weaving, smiting, and carving. However, the dominant of these occupations is farming. Thus, the Tiv cultivate root and grain crops such as maize (*ikyuleke*), millet (*amine*), groundnuts (*abum-ahi*) swamp rice (*chingapa*), sweet potatoes (*atsaka*) and a variety of beans (*alev/ ahuma*) etc (Makar 1994:42). As the Tiv have increased in population so has the production of food increased with the Benue plains

providing the opportunity for this imperative agricultural expansion.

In their pursuit of agricultural practice and food production, two functionaries are indispensable. This means that there are two specialists who are fundamental to food production among the Tiv. These are the *or u varen iwa* (black smith) and the *or u gban agbe* (wooden hoe handle maker). The fact is that to cultivate the soil requires the services of the *or varen iwa*. When the *or varen iwa* produces various sizes of hoe blades the *or u gban agbe* produces the wooden hoe handles into which the hoe blades are bought and fixed in order to cultivate the soil.

Sometimes, an individual could both be a blacksmith and a wooden hoe handle maker, but most often they are two separate technologists in the Tiv agricultural practice. These functionaries/specialists are seen as technologists because of their perceived innovation in the manufacture or production of these agricultural equipments. It can be clearly seen that without the *or varen iwa* and the *or u gban agbe*, food production would be a very difficult and enormous task hence farming cannot be done with mere palms.

The issue or bone of contention here however, is that these two functionaries have produced these agricultural equipments over a very long period of time spanning at least 400 years without commensurate improvement in the equipments they produce. For instance, the *gbar* has remained the big hoe it was known consisting of an iron blade and a wooden handle with little or no changes and neither has the wooden handle produced by the *or u gban agbe* undergone any changes or modifications.

This means that there has been no improvement in Tiv agricultural practice because the agricultural technologists have not been able to make new innovations or modify these farm implements. Tiv farmers cannot therefore engage in mechanize farming because using the hoe causes serious discomfort in the waist due to the long periods of bending required. This reduces the amount of work a farmer can do in a day(s) or even months. In this respect, one wonders whether

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the food basket status accorded the Tiv in particular and Benue state in general is a myth or reality.

The paper therefore examines the activities of these two all important functionaries and tries to decipher the possible reasons behind this technological lag affecting the Tiv in particular and African in general. It then makes modest suggestions aimed at changing this trend and improving on the agricultural production of the Tiv to actually lay claim to the food basket status. As it stands now, one cannot but doubt this presumed status of the Tiv especially when the Tiv are unable to export any food/cash crops produced on their land.

II. CONCEPTUAL CLARITY

The following terms and concepts which appear in this paper convey these related meanings:

Agricultural: This is the science or practice of large scale soil cultivation. Bolander (1995) further notes that the verb agricultural is related to, or characteristic of agriculture.

Technology: Refers to the science of technical process in a wide, though related field of knowledge. Industrial technology thus, embraces the chemical, mechanical and physical sciences as they are applied in the industrial process (Bolander 1995).

Technologist: This refers to some one who specializes in some branch of technology (Bolander 1995).

a) The Or u varen iwa (Blacksmith)

The blacksmith is one of the functionaries or specialists whom the Tiv can hardly do without. As a result of this, it is not uncommon to find the *or u varen iwa* in Tiv villages to perform this all important task. The importance of having the *or u varen iwa* in a village is not farfetched as it means easy access to farm implements. The farm implements produced by this specialist according to Adeg (2010:4) include *ishom* (machete), *ijembe* (axe), *ihyo(knife)*, *hondy kyaa* (big hoe blade for men) *hondy abya* (small hoe blade for women).

The agricultural implements listed above are the four main implements used on the farm in terms of tilling and cultivation to weeding and the clearing of fields in order to sow the seeds. The *or u varen iwa* uses the *ate iwa* (smithy) in the performance of his duties. Due to the fear of fire outbreak the *ate iwa* is usually set in the middle or outside the village and if within households, it is isolated from the other huts which are mostly roofed with thatch. Commenting on the tools used by the *or u varen iwa*, East (1965:62) enumerates as follow:

... the bellows (*akpa a iwaa*), the tongs (*akambe*), the heavy iron hammer and the small hammer with the wooden handle, the rake (*majagela*), the iron and stone anvils (for shaping hot pieces of metals) clay nozzle for the furnace, the water-trough (*kpesse iwaa*).

In an oral interview, a respondent, Iorenge Hom of Mbaadigam, Betse-Mbaduku in Vandeikya Local Government Area of Benue state explained that to become *or u varen iwa* (Black smith) a novice or apprentice need spend not less than two years to know the rudiments of smiting. He however, conceded that an apprentice who is intelligent could use less than two years to master the art; but that the more time the novice spends learning under the tutelage of his master the better and more skilful he becomes (oral interview).

There are indications that the Tiv might have been introduced to the use of *iwa* by the Udam who first introduced the machete to the Tiv who subsequently made use of it in *iwa varen* (East 1995: 65). However, oral tradition as preserved in myths indicates that the Tiv acquired the art of smiting from the animal kingdom. The oral source maintains that *alom* (the hare) the chief character of Tiv folklore had gone to mend his hoes at the place of the leopard in company of the *iwa* (the dog). The Leopard was reputed for killing and eating his clients; but the hare had no option as he needed the services of the leopard if he and his family were not to starve in the coming months as a result of the want of farm implements. On reaching the leopards compound the hare and the dog were ushered into the *ate iwa* (smithy) and while the hoes were being fixed the leopard made plans to also eat his clients.

The hare cunningly knew of this plan and whispered to the dog to give him the eye of one of the leopards he had killed on their way to mend the hoes. This jolted the leopard that disappeared into thin air in company of his family to avoid being eaten by the hare. Following this development the hare and the dog collected the smiting equipments and left. However, a quarrel ensued between the two friends and the hare parted from the dog who eventually set up the smithy. Similarly, a hunter domesticated the dog and took control of the smithy which explains why the smithy is called *ate iwa* in Tiv meaning (the dog's smithy). This marked the beginning of smiting among the Tiv (oral interview).

With reference to how the irons used in making different farm implements are acquired, most of the respondents explained that old hoe blades, rods and other iron materials that are good for use could be bought or picked from scrap and converted to use in the making of the *kyaa* and *abya* blades (big/small hoe) or *aho* (knives), *ijembe* (axe) which the farmers need. Therefore, sourcing of these materials is not so difficult as one could even pick on these as he walks about. The *or u varen iwa* is so much valued in the community in Tiv society such that he receives visits from both the men, women and the youth who are engaged in agriculture practice and need new tools or to mend broken ones and fix them back to use. As a mark of the trade, the blacksmith must be very honest with the clientele's by

producing hoe blades with qualitative materials that the farmer uses for long.



Source: Field trip observation- 11/03/2012

Plate 1: Akpa a iwaa (bellows) in the ate iwa (smithy) set behind a semi built wall to prevent the scorching heat from the live coals used in heating irons from reaching the or u varen iwa (black smith). The provision of this wall is a remarkable improvement from previous smithies. Also, some smithies now use the motor cycle wheel to fan or kindle the embers of fire. Note the two slim poles for fanning the fire lying on the semi wall



Source: Field trip observation- 08/10/2011

Plate II: Pieces of Iron/metal scraps at an ate iwa (smithy). The iron scraps form the major raw material for the black smith. These are heat in the coals and shaped in different sizes of implements



Source: Field trip observation- 08/10/2011

Plate III: The iron anvil for shaping pieces of iron into different farm implements



Source: Field trip observation- 11/03/2012

Plate IV: The clay nozzle for the fire. Note the coals in which pieces of iron scraps are buried for heating and formed into different farm implements



Source: Field trip observation- 11/03/2012

Plate V: A Blacksmith Mr. Iornenge Hom stands beside his ate iwa (smithy) during the oral interview at Betse-Mbaduku, Vandeikya LGA of Benue state



Source: Field trip observation- 11/03/2012

Plate VI: A Blacksmith Mr. Iornenge Hom sits in his *ate iwa* (smithy) demonstrating the usage of the bellowing poles at Betse-Mbaduku, Vandeikya LGA of Benue state.

On the other hand, if the *or u varen iwa* is not honest and uses light irons to produce farm implements which squeezes when it comes into contact with the social or tree roots, he is not patronised by the community. So if a black smith places premium on money rather than community service for which his people conceive his services to be, he loses clientele's. Therefore, the *or u varen iwa* is a very busy person in his community particularly during the rainy/wet season when farmers cultivate their lands. During this period farmers through the smithing with one problem or the other regard their farm implements seeking for a solution. The faster he attends to them the more they hold him in high esteem.

b) The Or u Gban Agbe (Hoe Handle Maker)

The *or u gban agbe* is another functionary which the Tiv cannot do without as far as agricultural practice is concerned. This is because he is responsible for producing the wooden hoe handles for the various sizes of hoe blades made by the *or u varen iwa* (Black smith). These could be *agbe* (wooden handles) for the *kyaa* (the big hoe for men) and *abya* (small hoe for women). They could also be *agbe* (plural) or *igbe* (singular) for axes, knives or machetes etc. On the *or u gban agbe*, East (1965:65) maintains that:

(Abinitio) The Tiv did not have many tools to work with (on the farm) as they have now. They had the digging stick, the wooden hoe for farming and

machetes for feeling trees which they got from the Udam.

The obvious fact that manifests here is that the *or u gban agbe* becomes the functionary to produce this all important component of the hoe for use by the farmer. It also shows that the art of farming was and has continued to be difficult especially then; when irons hoe blades were not known to the Tiv. In fact, East (1965:81) points out that even when the Tiv first learnt the art of planting yams by making heaps; which he said they learnt from the Udam, there were no iron hoes but wooden hoes.

To make a wooden hoe handle for his clientele's the *or u gban agbe* uses the *ityor* (a sharp long bladed equipment with a long handle) and a machete (*ishom*) or *ijembe* (axe). While the *ityor* is used for shaping the wood, the axe or machete is used for felling a tree or its branch. East (1965:65) comments:

(To make a wooden hoe handle), the *or u gban agbe* cuts down part of a *gbaaye* tree at a point where it branched and stripped off all the bark. Then he carefully worked on the *nombur* (blade) into a flat shape onto which the hoe blade is attached when pierced.

On how to acquire the skills for making *agbe*, David Betse Ningir avers that the novice first serves as an apprentice under a qualified *or u gban agbe* over a period of time. This he says could be three to six months depending on how intelligent the novice is and also how

he takes instructions from and observes his master manipulate several branches of trees cut down into fine *agbe* (wooden handles) (oral interviews)

In making the *agbe* the specialist does not just use any type of tree specie but hard wood. According to Bem Wende hard woods are better for hoe handles compared to the soft woods which soon decays or gets infested with insects and breaks. Thus, the choice of hard wood such as *gbaaye* tree (*Prosopis africana*), *koondo* (*Dialium guineense*), *gbagbongom* (*Burkea africana*), *har* (*Kyaha senegalensis*), *alumbu* (*Citrus spp/Citrus sinensis*), *malina* (*Gmelina arborea*), and *hulugh* (*Vitex doniana*) are used (oral interview). Also, tree species such as *mungur* (*Mangifera indica*), *gbiankpande/ gyankpande/ agabi/ Nyihar* (*Piliostigma Thoningii*), *hir-gbur* (*Vitex simplicifolia*) and *ahur* (*Anona senegalensis*) could be used but their durability is not so

much guaranteed as *agbe* made from hard wood. The art of making *agbe* requires no special place/shrine (Agishi 2-25 for the scientific names of trees).

Thus, the *or gban agbe* could use his *ate* (reception hut) or his court yard to perform his duties. It is to be noted that both the *iwa varen* and *or gban agbe* are masculine orientated jobs among the Tiv as females are hardly seen performing these tasks. However, the foregoing sentence does not in the least portend that women are incapable of performing these jobs especially in the contemporary technological world in which women are found in the different sectors of human Endeavour not to talk of agitations for women equality and 'de-genderization' of roles often backed with the saying: 'Whatever a man can do; a woman can do even better.'



Source: Field trip observation- 13/08/2012

Plate VII: Mr. David Betse Ningir the *or u gban a gbe* (hoe handle maker) shaping an *igbe* (hoe handle) at Betse-Mbaduku, Vandeikya LGA of Benue state. Note the *ltyough* in his right hand



Source: Field trip observation- 13/08/2012

Plate VIII: A half completed *igbe* (hoe handle) rests its handle on an *igbe* undergoing the shaping process.



Source: Field trip observation- 13/08/2012

Plate VIII: A stone used for shaping *agbe* (hoe handles). Note the wood chips on the ground



Source: Field trip observation- 13/08/2012

Plate IX: Different sizes of agbe (hoe handles) from different tree species under different stages of completion



Source: Field trip observation- 13/08/2012

Plate X: The *ltyough* (chisel) with its long wooden handle and tongue like iron blade is the major implement used by the *or u gban agbe* (hoe handle maker) in performing his task of shaping hoe handles. The *ltyough* performs the dual function of chiseling and planing of hoe handles



Source: Field trip observation- 04/10/2011

Plate XI: The *Ikyaa* (big hoe for men) and *Abya* (small hoe for women) already inserted into wooden handles. They are the end products of the Tiv agricultural technologists, the *or u varen iwa* (black smith) and the *or u gban agbe* (hoe handle maker) in Philip Iyorchemen Wende's compound at Betse-Mbaduku, Vandeikya LGA of Benue state.

c) *The or U Varen Iwa, or U Gban Agbe and African Religion*

As a scholar of African Religion and culture it is pertinent to situate the study in my field to give it a base or foothold. It was Mbiti who observed the indispensable role of Religion in whatever the African does when he stated that 'wherever the African is, and whatever the African does there is his Religion' (1969). This assertion is not far fetched in the performance of duties by the *or u varen iwa* and *or u gban agbe* among the Tiv. Thus, Religious taboos and rituals are associated particularly with the duties of the *or u varen iwa*. Subscribing to this Iornenge Hom observes that several taboos accompany his practice of *iwa varen*. These taboos according to him include:

- (i) A person is prohibited from removing any item from the smithy fire except with the permission of the blacksmith.
- (ii) No one including apprentices' removes the *akambe* (tongs) other than the blacksmith when there are buried in the smithy at the end of the days work. Thus, if an apprentice needs any equipment buried by the black smith in the absence of their master they necessarily wait or make do with equipments available not those buried.
- (iii) When the black smith sets up the *akpa a iwaa* (bellows) in their place, only he can remove them and no one else (oral interviews). *Iwa* (smithy) is associated with impotence when violated; it therefore means that anyone who breaks these

taboos is made impotent unless cleansed by the *iwa* priest to restore his male potency (oral interview).

Adega (2010:4) also adds that it is prohibited for someone to steal any item from the *ate iwa* (smithy). Similarly, when a fugitive, a child or woman engaged in quarrel or fight runs into the *ate iwa* to take refuge, such a fugitive is not pursued and dragged out of the *ate iwa*. When a person violated this rule, he/she was visited by thunder the patron deity for smiting and struck dead. In addition, suspected thieves were made to swear by *iwa* and if proven guilty becomes impotent and stood the risk of being smitten by thunder.

Furthermore, the *or u varen iwa* (blacksmith) could keep the *kpese iwaa* (water trough) in his smithy when he completes all the ritual processes as a full initiate into the *iwa* rites. In the *kpese iwaa*, the *or u varen iwa* who by virtue of this has become an *iwa* priest pours a drawly substance obtainable from the *huerza* tree. It is in the *kpese* that the black smith holds pieces of iron using the tongs in the process of joining them together to produce an item such as the *nombur kyaa* (the pointed end of a hoe blade that is fixed in the wooden handle) (oral interview).

When the *or u iwaa* has reached this stage he is said to have *bee iwa* (completed the initiation rites) and he could at this juncture erect the *iwa* emblem and settle all *iwa* related problems such as *ijuwa i kpen* (impotence), severe waist pains and barrenness in women especially if they had not given birth before. In

appreciation of his paternal kinsmen (*ityo*) and maternal kinsmen (*igba*) for their support in attaining such a status, the initiate make sacrifices which include human, food, drinks and the slaughter of animals such as a goat or pig.

By virtue of his position as *or u been iwa* (full initiate), apart from treating or handling *iwa* related problems such an initiate can adorn in the *gbegba* (symbolic necklace) as a sign and mark of his mastery of *iwa*. According to Iornenge Hom, there are two types *gbegba* necklace i.e. *gbegba u ityumbun* (rituals) and the *gbegba a iwaa* (impotence). An initiate who has acquired the two *ugbegba* and achieved the status of *bee iwa* wears the two necklaces crisscrossed on his shoulder to depict his enviable position and status in Tiv Traditional Religious circles (oral interview).

Furthermore, Bem Wende and Gbanban Akpage both black smiths, it is only an initiate who has completed all the ritual rites associated with *iwa* that performs the purification rites to remove the *ljembe Aondo* (black meteorite stone) in a tree or building struck by thunder and lightening. Similarly, all such mastered practitioners who engage in smiting during the rains. Thus, if one is not a full initiate into *iwa* but tries to carry out smiting during the rains there is a clash of thunder/lightning bolts and the red hot iron from the fire which could cause devastating effect including death and burning by fire (oral interview).

For the *or u gban agbe* (hoe handle maker), he requires no initiation or sacrifice for his trade. However, if in the course of carefully searching for trees with branches suitable for *agbe* (hoe handles) and he attempts to fell a tree in which the *adzov* (spirits/fairies) have made their abode he could invoke their wrath. They could beat him severely for trying to dislodge them and disturbing their peace. To this phenomenon, Senenge Iorwuhe and Matthews Nyitar both *Mba gban agbe* (hoe handle makers) claim that the *Adzov* could also make such an unfortunate person to wonder in the bush aimlessly without actually falling any tree or cutting off the *agbe* (oral interview).

When this happens, sacrifices are offered the *adzov* in terms of a white chicken/ram and kola nuts in appeasement to release and remove the spell they have cast on the culprit. The *Adzov* priest performs this ritual in which the culprit is warned against further falling any trees at random in the bush (oral interview). The *Adzov* in this sense could be said to be conserving the environment and discouraging the random felling of trees which could lead to erosion and desertification.

d) *The Or U Varen Iwa (black smith) and the Or U Gban Agbe (hoe handle maker) as Agricultural Technologists among the Tiv: Issues in Africa's Technological Development*

Technology is something which grows and develops gradually from a crude form to a sophisticated

form as society evolves from one stage to the other. Also, socialization and interaction between societies could fuel technological growth. Most often therefore, there is the issue of technological transfer in which one society borrows one form of technology from another society and modifies it to suit its own purposes. This means that a tractor made for use in America will not necessarily be suitable in sub-Saharan Africa because it was not made for such a geographical environment; if such a tractor is to be used in Africa it would have to be modified to suit the African environment.

This is how technology has evolved and grown since man, first made use of tools to assist him in his day to day tasks. The essence of technology is to reduce man's physical efforts and strength in the performance of tasks and to hasten and make such tasks easier for him. As a result of this conception, when technology is first introduced to a people, it is often not easy to adopt such a technology. This is however, made easier as man puts such tools and equipments into perpetual and constant use. East (1965:65) agrees with this proposition when he wrote concerning the Tiv that:

When the new farm implements developed by the Tiv agricultural technologists first made inroads into Tiv society and contact with Tiv farmers; at first it was not at all easy for them to make a farm with these tools, but they went on trying until they got used to it.

However, the irony of the introduction of agricultural technology in the form of *kyaa* (big hoe), *abya* (small hoe), *ishom* (machetes), *ijembe* (axe) and the continued use of these equipments and eventual mastery of their use, no remarkable achievement has been made by the Tiv agricultural technologists of *mba varen iwa* (Black smiths) and *mba gban agbe* (hoe handle makers). What we see is that for over 400 years, the *kyaa*, *abya*, *ishom*, *ihyo* (knife), *ijembe* (axe) and *agbe* (hoe handles) have neither been modified nor new types introduced into the Tiv agriculture which is the hub of Tiv economy.

Thus, since the Tiv started making use of these equipments, they have had to bend over the *kyaa* and *abya*, *ijembe*, *ishom* and *ihyo* making use of their physical strength. This has often reduced the amount of work done over a long period of time. It has therefore not been possible to introduce mechanized farming among the Tiv because of the use of these crude agricultural equipments produced by the Tiv agricultural technologists. As a result, even though the Tiv claim to be the food basket of Nigeria, they are not engaged in mechanized farming and none could be said to have made it to a big time, rich farmer. The *Kyaa* or *agbe* from Tivland as well as the food it produces have not been exported to any country of the world for cash.

What we see is the use of physical strength and energy on farms involving the youth, women, children who spend considerable time tilling, weeding and

cultivating crops, something that could be swiftly done with machineries. This has ensured that Tiv farmers with large farms marry many wives who equally give birth to a legion of children to help in these farms and sometimes lack basic necessities of life including education and health. Most annoyingly, is the fact that Tiv communities where these agricultural products are produced from have neither electricity, pipe borne water, motor able roads, health care facilities and schools. Ignorance and disease thus, rule Tivland in the 21st century.

Certain factors are responsible for this apparent lag in technological development among the Tiv and Africa in general as can be seen from the succeeding enumeration below:

1. The first and foremost issue which has led to the technological lag of the Tiv has to do with the phenomenon of *as it was in the beginning*. To this when asked why they have not made new innovation in their production of the hoe and the handles; most Tiv agricultural technologists insinuated that "that was how their forefathers produced them from the onset. This implies that there is no need to explore avenues for change modification and development because "As it was in the beginning so shall it be without change or end – Amen. Akimbote (2008:119) shares in this view expressed above when he wrote that rigidity could explain African (Tiv) technological lag. He explained that Rigidity has to do with the fact that things do not change much in the system. The old ways of doing things by our ancestors many decades ago are still being followed. This inhibits room for bringing new ideas or methods into the system. Akimbote (2008:119) therefore maintains that:

The same old ways of doing things are passed on from one generation to the other. There is even a popular saying that things must be done the way they were usually done so that the same results could be obtained. In other words there should be no modification, alteration or a local departure from the traditional ways of doing things.

As a result of this above, a deviant who openly departs from this code are punished. Depending on the grievance of the presumed offence by the elders, a person could be verbally abused, isolated, expelled from the community or in some extreme cases, he could be put to death. Who would want to sacrifice his/her life because he/she wishes to bring changes beneficial to the whole society?

2. There is also, the problem/issue of *secrecy* attached to most of the ways African and the Tiv in particular do their things. By secrecy, it means that certain knowledge and information including technological are taught to a selected few. For instance, not everybody in Tiv society is privy to the *iwa* except initiates. Commenting on the issue of secrecy and

its role in the lagging technology of the Tiv, Tor-Geri (2012:14) avers that: most often the practice or knowledge in a particular field is only held by the people that owned it and as such its secrecy of ownership could not guarantee its easy accessibility. In most cases, Tiv technologists die and are buried with their knowledge because they had had it a secret knowledge and never divulged it to others.

3. *Taboos* also play a significant role in the lagging technology of the Tiv. Taboos based on superstitious beliefs often create unnecessary fears in people and prevent them from advancing as a result of repercussions attached to the violation of some taboos. As a result, many useful ideas that could help the Tiv leap out of the Quagmire of lagging technological advancement which could be of benefit to humanity have been kept as secret.
4. Another fundamental issue which has posed a serious challenge to the technological advancement of the Tiv and Africa at large is that of *illiteracy*. This could be regarded as one of the greatest problems facing African's technological quest. Illiteracy here has to do with the absence of the skills for reading and writing and this has created serious problems. Most often the indigenous knowledge system for want of writing is not documented but held in memory and is subject to alteration or being completely forgotten. Akimbote (2008:121) is of the view and rightly so that, if reading and writing were involved in African's indigenous knowledge system, most of these short comings would not cause any harm to our technological advancement.
5. Similarly, there is the problem or challenge of *witchcraft* among the Tiv. As a result, any person who demonstrates extraordinary skills and is curious to know is often labeled a witch. This attribute soon suppresses the person's zeal and he/she returns to the status quo. Children whose curiosity leads them to ask several questions regarding nature or openly talk of their ideas are seen as being rude. They are expected to be quiet in the midst of elders. The suppression of children/youth who are said to be leaders of tomorrow as well as social innovators is not good for the progress and quest for socio-economic and technological advancement of Tiv society and Africa in general. Thus, while we recognize and respect the wisdom and authority of the elders, the youth should be allowed to contribute their own ideas. This is what brings progress even as attested by the Tiv who have a saying that: *Wanye kaa er I bur yar tior* meaning even a child could have a solution to a problem.

III. SUGGESTIONS

From the foregone discussion, we make these modest suggestions as a way out of the problem of backward technological development facing the Tiv and Africa in general:

First and foremost, we call on the Tiv in particular and Africa in general to engage in the transfer of technology. According to Bolander et al (1995:1015) Technological transfer entails the transfer of technological knowledge generated and developed in one place to another to achieve some practical ends. It is to be noted that the Asian countries of China, Japan, Taiwan, Korea, Malaysia etc popularly called the Asian Tigers have attained the rate of technological and industrial advancement today due to the transfer and domestication of technology from Europe and America for practical use in their countries.

As a matter of policy the Asian Tigers focus their attention and investment on the establishment of a strong industrial base and an export oriented economy. Currently the rate at which these countries are growing technologically threatens the leading markets of Europe and America put together. Most of the electrical gadgets ranging from Television sets, radios, refrigerators, and satellite decoders down to little items such as rechargeable lamps and torch lights have one Asian name or the other on the label.

Tiv/African technologists whether traditional or modern, must strive to borrow technology from other lands to domesticate and make such items relevant to our people. This would even make them to produce tractors that would make heaps for the planting of yams and other tubers and those that would make tractors to make ridges for planting of cereals and vegetables. It is a great irony that the Tiv reputed for their nocturnal technology that produces nocturnal planes, tractors, trailers, bicycles, cars, ships, radios and television are unable to transfer these nocturnal technology to their advantage to help develop themselves and Tivland in general.

Furthermore, we call on the Tiv to invest in education in order to provide quality education to their children and the youths. This would make them literate i.e. able to read and write. As a result, the issue of taboos and superstition would be greatly reduced if people are able to read and write. This will also preserve indigenous knowledge which often dies with innovators. The ability to read and write will equally make the Tiv more prone to accepting new ideas which would then spur Tivland and place it on the verge of technological development.

But most importantly, the government must as a matter of necessity turn its attention towards the issue of technology as affects the African people. Towards this regard, the Nigerian and African governments must sponsor research into technological feats especially

where an individual has made a breakthrough. The current lukewarm attitude posed by the government is not encouraging. For instance the Late Engr John Dzomon of TZ Engineering Technologies, Makurdi, Benue state had produced a helicopter, but lacked governmental sponsorship to improve on the air craft and he later died with his knowledge and skills perhaps a frustrated Tiv man who could not pursue his passion and technological feats to a logical conclusion, for want of funds.

Governmental interest in this regard should not be that of launching satellites into the orbit alone or expressing such desires on the pages of newspapers/magazines and inscriptions on T-shirts and face caps worn by government officials and their cronies. Thus, if genuinely worried by the apparent technological backwardness of the continent as expressed by the African Union's (AU) heads of state in 2007, something more meaningful needs to be done to ease out of this problem. For instance, the allocation of at least one percent of the gross domestic product to research and development by the year 2020 should be made practical not a tea party promise (Ochefu et al 2009:101).

The Heads of state meeting in Addis Ababa, Ethiopia in 2007 and the declaration of the year 2007 as Africa's year of Science and Technology does not transmit to actual technical break through. African universities and polytechnics must as a matter of necessity be properly funded to achieve the aim for which they were established. Most of these educational institutions as it were lack both qualified manpower and resources to embark on such an all important project with laboratories and libraries having out dated books and obsolete materials.

IV. CONCLUSION

In conclusion, we need not over flog this issue any longer hence it is not the member of time a man sleeps with a woman that she is impregnated. However, the Tiv must look into this lag in technology affecting them inwards i.e. transfer of technology, if not they would remain 2nd class citizen in Nigeria stricken by poverty, hunger, disease and illiteracy and would not be reckoned with by serious minded ethnic groups in search of technological breakthrough such as the Igbo. The world is fast advancing technologically and the Tiv must advance with it and not lag technologically even as the world edge deeper into the 21st century.

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List of Respondents

S/NO	NAME	SEX	AGE	OCCUPATION	PLACE OF INTERVIEW	DATE
1	Iornenge Hom	M	44Yrs	Blacksmith	Betse-Mbaduku Vandeikya LGA	11/03/2012
2	David Betse Ningir	M	50Yrs	Hoe handle Maker	Betse-Mbaduku Vandeikya LGA	13/08/2012
3	Aondongu Iorhemen	M	35Yrs	Hoe handle Maker	Betse-Mbaduku Vandeikya LGA	04/10/2011
4	Gbaban Akpage	M	55Yrs	Blacksmith	Betse-Mbaduku Vandeikya LGA	05/10/2011
5	Bem Wende	M	40Yrs	Blacksmith	Betse-Mbaduku Vandeikya LGA	08/10/2011
6	Aondoakaa Iyohemen	M	52 Yrs	Blacksmith	Tse Duger, Ukum LGA	07/09/2012
7	Aondoakaa Ayainjo	M	46 Yrs	Blacksmith	Mbakaange, Vandeikya LGA	16/04/2011
8	Tersugh Pila	M	28Yrs	Hoe Handle Maker	Tes-Agberagba, Konshisha LGA	12/10/2012
9	Mathew Nyitar	M	26 Yrs	Hoe Handle Maker	Uchen, Makurdi LGA	10/11/2012
10	Senenge Iorwuhe	M	26 Yrs	Hoe Handle Maker	Tse Duger, Ukum LGA	08/09/2012
11	Terfa Aungwa	M	30Yrs	Hoe Handle Maker	Tse Duger, Ukum LGA	08/09/2012