



Voice Fm Radio (Eagle on the Hill Fm) Nsukka in Agricultural Development of Nsukka Zone

Attah, Celestine
Nwonu, Clifford
Obasi, Ferdinand

Authors' Affiliation

Department of Mass
Communication,
Caritas University Enugu

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ABSTRACT

Just like every other communities in Nigeria, Umashi village in Iheagu, Nsukka zone has embraced radio, which has been widely accepted as a powerful media tool that will bring the desired agricultural development needed in the localities. Therefore, it is based on this that, this study was conceived for Assessment of Voice Fm radio (Eagle on the Hill Fm) Nsukka in agricultural development of Nsukka zone. Survey method was adopted; a sample size of 385 was taken out of the actual population. The researchers also designed research questions, formulated and tested hypotheses. In carrying out the study, data were collected through the use of questionnaire. The major findings of the study are that, voice Fm radio has immensely contributed to the agricultural development of Umashi village in particular and Nsukka zone generally through it's agricultural discussion programmes. Also, Voice FM has been able to promote the interest of the farmers in Umashi village, and Nsukka zone in general.

Introduction

The 96.7, Voice Fm station came into being in 2014 courtesy of Senator Ayogu Eze's Constituency project Scheme. For the past decades, the people of Enugu North Senatorial District (Nsukka zone) had been locked out of the information due to poor reception of both television and radio signals from Enugu capital city, media stations as a result of the zone's topography that does not allow air waves from Enugu to reach the zone. For those who wish to listen to any radio signal from the state capital, they have to move from one part of the house to another in order to have access to noisy frequencies. The matter is worse with television signals. Only those who have the means of installing satellite dishes have access to TV signals as there is no more terrestrial TV signal that could be accessed.

These ugly trends had continued to persist until the senator representing the Enugu North District in the 7th Assembly threw himself into the game as the Chairman, Senate Committee on Information to ensure that a station of the Federal Radio Corporation of Nigeria (FRCN) was established in the zone to cushion the effect of dearth of broadcast news and information in the area.

Radio broadcasting is one of the highest technological breakthroughs of human race. The process has to do with the generation of electromagnetic signals transmitted through space, by means of radio frequency received by a heterogeneous audience at different places at the same time. Radio is one of the crown jewels of human accomplishment. It is the foundation upon which rests the electronic infrastructure central to a modern life.

Technically, according to Sambe "radio refers to the harnessing of electromagnetic waves to transmit wires connecting the transmitters and receivers (2005, p.56). Radio belongs to the broadcast medium. It is technically described as channels of the electronic medium. Hence, radio broadcasting concerns the transmission of sound on electronic

Radio broadcasting as agent of development has become of the greatest instrument used in continually attracting more attention by both consumers and new generation investors, since its first transmission of both high quality voice and music. In Nigeria, radio broadcasting was officially commissioned in 1935 in

Lagos. It was known as Radio Distribution Service (RDS). Its main duty was to relay British broadcasting Corporation programmes with an hour for local programmes. Subscribers were made to pay fees for listening at their locations (Sambe, 2005).

There has been rapid creation of radio station established all over Nigeria because the 1979 constitution of the Federal Republic of Nigeria vested the ownership stations, solely of Federal and state government. There has been a reversal to the situation since 1992 when the federal government surrendered the monopoly over the ownership of the broadcast media. Today, there is a high proliferation of radio and television broadcast stations owned by government and private individuals across all the states in Nigeria, including Enugu State.

Nigeria like other developing countries of Africa has bulk of its population concentration in the rural areas. These relatively, underdeveloped rural areas are not effectively covered by radio broadcast to empower the rural dwellers with skills, upgrade their awareness and entertain them where/when necessary.

The success of agricultural development in third world countries largely depends on the nature and extent of use of radio mobilization of the people for development. The planners in developing countries realized that the development of agriculture could be hastened with the effective use of radio- news programmes and forms of communication products.

In a country like Nigeria, where the literacy level is low, the choice of communication media is of vital importance. In this regard, the radio is significant as it can effectively transfer modern agricultural technology to literate and illiterate farmers alike even in interior of the rural areas within a very short time, using local dialect very familiar with the people.

According to McBride et al (1980:60), "radio is the most ubiquitous of the mass media". For instance, in India, farm and home broadcast with agricultural thrust were introduced in 1966, to enlighten farmers on the use of various technologies to boost agricultural development. At present there are about (<http://www.baie>licensing-zero...>) Nigeria currently has 750 functional broadcast stations at 2023.

With the main stream of Nigeria population engaged actively in agriculture, radio could serve as a suitable medium of disseminating farm information and latest

technical know-how. Girard (2001:6) observed that radio more than any other mass communication medium speaks in the language and with the accent of its community. It is easy to understand the appeal to listeners of having local issues discussed in the “accent” of the local community.

Umashi community is a small community located in Iheagu – Nru Nsukka local government area of Enugu State. The estimated population is 1,600 and the adult among them are mostly subsistence farmers and petty traders. There is no organized market where the farmers sell their farm produce, the place where the organized one is located is far from them. They go to the neighbouring villages where the market functions once in every four days

Statement of the Problem

The rapid growth of radio stations has raised concerns over whether they are serving the public interest or the interest of advertisers and their profit-minded owners. On one hand, there are people who argue that radio is a conduit of western cultural product like music and advertisements, which are suppressing development-oriented local content. On the other hand, there are those who believe that radio has taken the government and its policies closer to the people than in the days back.

Several research works have been done on the role of radio (Voice Fm) in the development and agricultural development of Nsukka geo-graphical zone. And none of the research has been micro-zoned or tailored towards Umashi village. Therefore, it was based on this that the researcher decided to assess Voice Fm (Eagle on the Hill) Nsukka in the agricultural development of Umashi village.

Objectives of the Study

It goes without saying that everything we do is geared at reaching some goals, in this study, it is really true and applicable. The specific objectives of this study are:

- i. To investigate the extent of success Voice Fm Nsukka has had on Nsukka zone agricultural development.
- ii. To examine how Voice Fm Nsukka disseminate agricultural information to farmers in Nsukka zone.
- iii. To study how Voice Fm Nsukka agricultural programmes affect rural communities like

Umashi village in Nsukka zone. (whether it promotes their interest in agriculture or influences their attitude and behavior.

- iv. To find out the kind of impact Voice Fm Nsukka agricultural programmes have on the farmers in Umashi village in Nsukka zone.

Research Questions

The research questions that used to guide this research work are:

- i. To what extent or level does Voice Fm Nsukka has on Nsukka zone agriculture development?
- ii. How does Voice Fm Nsukka disseminate agricultural information to farmers in Nsukka zone.
- iii. In what way is Voice Fm Nsukka agricultural programmes affect rural communities like Umashi village in Nsukka zone?
- iv. What impact has Voice Fm Nsukka agricultural programmes on the farmers in Umashi village in Nsukka local government area?

Research Hypothesis

This hypothesis was formed in order to guide the research:

- H₀: Voice Fm Nsukka has improved agricultural development in Umashi Village of Nsukka local government area
- H_i: Voice Fm Nsukka has not improved agricultural development in Umashi Village of Nsukka local government area

Literature Review

The Radio

We can say that radio serves as a medium which provides information. It is very essential for overall mobilization of those in urban and rural areas. Radio is seen as the most effective medium of reaching people in the society. Okunna (1999, p.123) explained radio as “having the capacity to cut through the barriers of illiteracy and infrastructural facilities which are major limitations to the print media”.

Radio as a medium of communication has contributed immensely to the promotion and influence of people in the society. Many people have strong believed to radio programmes because it tends to influence their lives directly.

The birth of radio in Nigeria has a link with some political and cultural factors. Akpan (2000) sees radio as a very powerful audio aid in teaching and learning process. According to him, with radio the learning can have demonstration at close quarters. Radio has the capacity to pass on knowledge thus making for learning.

Again, Akpan (2000, p.29) media information has a tremendous energy for change. Change in this context refers to learning which is needed most in rural areas where lots of people are wallowing in ignorance. They need media information to improve in all aspects of life. For instance, in farming, they need adequate media information to understand the current trends and latest farming techniques that will improve and increase their farm produce. He again suggested that radio can be a good medium for mobilizing and educating the people. It can be used to transmit knowledge. Its ability to talk and be heard makes very unique

Radio information is germane to agricultural production. Past researches showed that radio stations disseminate agricultural information to farmers in Nigeria. Despite the effort of radio in this direction, farmers have not been able to satisfy both local and international demands (Ojom0 & Odigie 2020, p.1). Benard, Dule & Lamtane (2018. P56) asserts that agriculture is the backbone of most Africa countries. According to Ani et al., (2015) meeting the demand for food is an essential pre-requisite for successful economic, social and political development, and it can be achieved either through domestic production or imports.

Farming is an important regional source of livelihood for about 200 million people (nearly one third of the population) of sub-Saharan Africa (Abdoulaye et al., 2014). The high output of agricultural research in recent times has led to a large pool of new agricultural technologies which must be disseminated to farmers. Appropriate farmers for dissemination of such technologies and other information must be considered by radio stations. In essence, information dissemination is germane to farm production. Unarguably, it is information that can make farmers

to progress in production activities such that they can satisfy both local and export demands.

Osikabor, Oladele and Ogundele, (2011, p.69) opines that information supports decisions, decisions trigger actions and actions affect the achievement or performance of the system. Farmers may not be able to take logical decisions as they pertain to farm production activities without relevant agricultural information being disseminated to them. In this regard, radio becomes a critical tool for disseminating agricultural information to farmers in Nigeria.

According to Ojomo & Odigie (2020 p.2) to improve the production capacity of farmers, their information needs have to be met. For instance, farmers would need information on availability of seedling, loan facility, and availability of modern tools, climate conditions, storage facility, and where to sell their farmers, using different formats depending on the type of information being disseminated. Further, radio stations use different programme types to disseminate agricultural information to farmers.

Ojomo & Odigie (2020, p3) said there is evidence that radio stations in Nigeria disseminate agricultural information to farmers generally, there is a dearth of literature on the formats these stations use to disseminate such information. Nazari & Hasbullah (2010 p. 13) notes that we are living in a world that is saturated by mass media with our environment brimming with data and information. In recent decades, the widespread use of the mass media has resulted in heightening the level of public knowledge in different fields. Buren (2010 p.45) point out that among the diverse mass media, radio and television, due to their wide and vast range of viewers, have had an outstanding position, particularly with regard to informal teaching, and are considered as the best cultural and educational media (Tancard and Verner 2015 p.23). Many researcher and educators such as (Suvedi et al., 2019; Trede and Whitaker 2018; Caldwell and Richardson, 2015) have tested the understanding of farmers and other clients on the delivery of educational information. The outcomes of their studies indicate that different media and methods are used by extension educators to communicate new and emerging technologies to farmers.

Relevance of Radio's Agricultural Programs

Castello & Braun (2006) note that a one-way communication process cannot be used as effective

communication in the process of development as there is need for feedback and constant exchange of information between communities, partners and interest groups, and official entities.

Therefore, agricultural programs are designed in a way that it is appealing to the target audience. Wachete, Ndavula & Koome (2018 p.630) note that the style of presentation simplicity of how the information is communicated, use of expert, accessibility of the program all aim at attracting the farmers. For agricultural programmes to be more effective, the producers should involve farmers in their production as a style of presentation so that the farmers can use these programs as a platform to address agricultural issues that affect them. This translates to the relevance treatment of the radio agricultural programs on farmers.

Local and community based media plays a great role in enabling rural communities to access information in their local languages. Ekoja (2004 p.199) notes that habitual transmission of radio agricultural programmes disseminate important information about new farming methods to farmers and as farmers receive helpful information on radio; they are able to apply the new techniques gradually improving farming methods. Agricultural information is obligatory to reach farmers and agriculturists in order to meet up their needs. Babu et al., (2012 p.28-37) note that understanding farmers' information needs aids in designing suitable programs, policies and organizational innovations. Assessments of information needs provide designers of programs with the capacity to develop interventions for users with information needs that are specific.

The radio's nature of delivery-talk that is carried through all radio formats appeals to the audience differently. Myers (2008) observed that the radio content of a development nature will work on radio better than it would on television since radio better communicates ideas that are complex and adds value to the imaginations listeners' of the listeners.

Wachete, Ndavula & Koome (2018 p.630) observe that radio programmes attract large following from the audience if the programs are well produced, this will also depend on the content, format or style, use of experts and presentation. Myers (2008) further observes the challenges development content on radio faces; the want to generate programmes on a tight budget, meaning that potential of high impact

educational programs which require keeping hold to teams of dedicated writers, experts, editors, technicians are too costly to produce for communities and as such, the programs are produced by separate production houses and funded by government and donor aid. It is not surprising, therefore, that the Africa airwaves have live studio-based programs, that is, call-in-programs, news and live studio discussions (myers 2008). A study done by Ango et al., (2011 p.187) on Radio agricultural Programmes showed that 26.7% of the farmers in the study area achieved knowledge of agricultural practices through the use of agricultural programs aired by radio programs. 17.8% of the farmers accounted to have received knowledge and information on the prevention of post-harvest losses and a 16.7% of the farmers indicated to have received knowledge on appropriate and accurate fertilizer and treatment application for various animal diseases.

Factors Influencing the Usage of Radio as Sources of Agricultural Knowledge

Finding indicates that several factors influence the usage of radio as source of agricultural knowledge among farmers. They are as follows:

Time for airing agricultural programmes

Time preference accessing agricultural radio programmes among farmers is contrary to the broadcast time of most agricultural radio programs. According to a research conducted by Focus Group Discussions, most radio agricultural programmes were broadcasted during morning hours, however, most farmers involve themselves in agricultural activities from morning to afternoon and prefer listening radio agricultural programmes in the evening or at night. This implies airing agricultural radio programmes during morning and afternoon limits more than half of the farmers from accessing agricultural knowledge through radio. This is supported by Mubofu & Elia (2017 p. 82), Mohammad, Butt & Ashraf (2004 p.159) who also found that listening to radio agricultural programmes become high if such programmes are aired during farmers preferred time.

Ownership of radio sets

Among farmers radio broadcast were either accessed through radio or mobile phones with a radio application (Nazari & Hasbullah, 2010 p. 18). Most of the farmers use radio set on their phones while

many of them also own radio set. Moreover, finding indicates further that majority of the farmers who own radio sets used that for accessing agricultural knowledge. Therefore, ownership of radio sets by farmers is determinant of physical availability of the medium, ownership enhance farmers' exposure to radio agricultural programmes.

Quality of signals

The quality of signals influences the usefulness of radio as sources of agricultural knowledge. According to Focus Group Discussions, some few areas had poor radio reception; this limited some farmers from accessing knowledge.

Empirical Review

A study carried out by Maurice, D. C., Ali, S. S. and Ali, Y. (2019) which was titled 'the role of agricultural radio programmes in the adoption of agricultural production technologies among farmers in Girei local government of Adamawa state. The result of the study showed that majority of the farmers in the local government listen to Gotel Fm which airs agricultural programmes like "fish production, poultry disease control, planning methods, crop production related information to the farmers etc.

Another study carried out by Tafida I. and Sabiu S. A. (2021) analyzed agricultural radio programmes utilization among crop farmers in Kano state, Nigeria. The result of the study revealed that 91.8% own a radio set which allowed them to listen to agricultural radio programmes. It also showed that crop farmers highly utilized planting date/technologies, improved varieties of crops/seeds and seed dressing and treatments. The study concluded that access and utilization of agricultural radio programmes were highly affective towards the improvement of crop production.

Theoretical Framework

The stimulus – response and the development media theories were selected as theoretical foundations for this study.

Stimulus Response Theory

Stimulus response theory maintain that the mass media is extremely effective and mind controlling agents capable of making all human being respond homogeneously to its powerful stimuli. The theory states that since individual were seen as separate

members of the mass media audience there could be no social control (as in bond) to hamper the powerful media influence. So, it was believed that media practitioners could enormously exert influence on the people's mind and at the same time direct their minds particularly with the use of emotional appeals.

The application of this theory to the study is that the Voice Fm listener's interest in a particular Agricultural programme on the radio is stimulated by sound. And when listeners are stimulated they respond to the message being passed by way of carrying it out on their farm lands.

Development Media Theory

The development media theory was one of the two media theories that was added by Dennis McQuail in (1987) to the already existing four normative theories propounded by Siebert, Peterson and Schramm (1956) what led McQuail to bring out this very important theory was that the four normative theory propounded by Siebert et al which are the Authoritarian media theory, the libertarian theory, the social responsibility theory and communist theory, did not meet the demand of the developing countries because of the following reasons that hindered their operation:

1. Limited supply of essential communication infrastructure
2. Limited availability of requisite professional's skill
3. Limited cultural production resources
4. Limited availability of literature audience
5. Limited over dependence on the developed world for technology skills and cultural products. These things limited the developing countries from practice of the other four media theories.

As McQuail saw that the media is a very powerful instrument for development, he made this theory so that developing countries of the world can supply it for their self-development by carrying out their media role effectively to meet the need of their area.

Research Method and Design

According to Obasi (2013, p3), Research design is a blueprint which specifics how data relevant to a given identified problem should be collected and probably analyzed to produce authentic result. Therefore, the survey research method was used in the study. The choice of the survey was borne on the fact that study

focused on opinions, attitudes and perceptions of people and gave the researcher the opportunity of interacting with the respondents

Population of Study

A population according to Asika (2012, p. 39) is made up of all conceivable elements, subject or relating to particular phenomenon of interest to the researcher. It comprises all these objects or subjects that make up the study. Also, Ohaja (2003, p. 73), opined that population of study refers to all those persons or things that fall under the umbrella of the topic or that can be examined to address the research problem or meet the research objectives.

The population of this study comprises six local government areas that make up Nsukka geographical area and they are; Nsukka, Igbo Eriti, Igbo Eze South, Igbo Eze North, Udeni and Uzo Uwani with the population figure of 122, 8807, that is according to the National population Commission (2006). But the estimated population figure of this study was projected to 1,975,922. The population figure was projected from 2006 population to 2025 using United Nations Development Programme (UNDP) formula. The UNDP population formula state that:

$$P_p = \frac{G_p \times P_i}{100}$$

$$P_p = P_i \times T$$

$$P_p = P_i \times G_p$$

$$\text{Where } P_p = \text{projected population}$$

$$G_p = \text{Given population}$$

$$P_i = \text{Population increase index (3.2)}$$

$$T = \text{period between the given population and year of study}$$

$$P_p = \frac{1228807 \times 3.2}{100} = 39321.8$$

$$P \times T = 39321.8 \times 19 = 747114.6$$

$$P_i + G_p = 747114.6 + 1228807$$

$$P_p = 1,975,922$$

From the above projected increase in population, Nsukka zone has a total population of **1,975,922**

Sample Size

Nnauko (2016, p.31), asserted that sample is a smaller group of element drawn through a definite procedure from a specified population. A sample also refers to a subset of the population that is actually studied by researchers. The sample size for this study will be derived from the population using Taro Yamane formula.

The Taro Yamane is given.

$$N = \frac{N}{(1+N)(e)^2}$$

Where:

n = desired sample size

N = population under study

I = at unity (Always constant)

e = level of significant or error margin taken

(5% or 0.05)

thus;

$$n = \frac{1,975,922}{1 + 1,975,922 (0.05)^2}$$

$$n = \frac{1,975,922}{1 + 1,975,922 (0.0025)}$$

$$n = \frac{1,975,922}{1+4939}$$

$$n = \frac{1,975,922}{4940}$$

$$n = 399.9$$

$$n = \text{Approximately is 400}$$

Therefore, the sample size for the study is 400

Sampling Technique

The sampling technique adopted for the study was simple random sampling technique. This technique was adopted because it will give the researcher the freedom to choose from the sample population of those who can respond reasonably to the questions in the questionnaire.

Data Presentation and Analysis

The data was analyzed in a tabular form using simple percentage and frequency tabular presentation for clarity and understanding.

Therefore, out of the 400 questionnaire administered, 385 or 96% were properly filled hence valid for the study, while the other 15 or 4% copies of the questionnaire were not returned. The researcher analyzed only research questions 2 and 4 and then, tested the hypothesis.

- (1) Does Voice Fm radio Nsukka disseminate agricultural information to farmers in Umashi village through Agriculture discussion programmes?

Table 1: Response to the question

Response	Frequency	Percentage
Yes	270	70.13%
No	115	29.87%
Total	385	100%

Source: Field work:2023

The above table shows the reaction of the respondents on whether they listen to voice fm agricultural discussion programmes 270 respondents representing 70.13% affirmed that they do, 115 respondents (29.87%) said no.

- (2) Does the impact that Voice Fm agricultural Programmes have on the farmers in Umashi village positive?

Table 2: Response to the question

Response	Frequency	Percentage
Yes	248	64.33%
No	92	23.90%
Undecided	45	11.69%
Total	385	100%

Source: Field work: 2023

The above table shows how the respondents reacted to the question of how the agricultural programme of voice fm affects you positively or not. 248 or 64.33% of the respondents said that they were affected positively. 92 or 23.90% of them said No while 45 or 11.69% respondents were undecided.

Test of Hypothesis

H_0 : Voice fm radio has not improved agricultural development of Umashi village

H_i : Voice fm radio has improved agricultural development of Umashi village

Response	O	E	O-E	$(O-E)^2$	$\frac{(O-E)^2}{E}$
Yes	248	128	120	14400	32343
No	92	128	-36	1296	10.12
Undecided	45	128	-83	7569	59.13
Total	385				392.68

Source: Field study 2023

From the above table, degree of freedom (of) was taken at $n-1 = 3-1=2$, level of significance is at 0.05 Chi-square (X^2) critical table value is 5.991, the calculated X^2 value 392.68

Decision Rule: The rule states that when the calculated X^2 value is greater than that of the X^2 critical table value, the alternative hypothesis will be accepted and the null hypothesis rejected and vice versa. In this case, the calculated X^2 (392.68) is greater than the table value (5.991), and that the alternative hypothesis accepted which states that the voice fm radio has improved agricultural development of Umashi village. So, we reject the null hypothesis.

Discussion of Findings

Going by the findings of the study, voice Fm radio (Eagle on the Hill) has been able to promote agriculture in Umashi village mainly through discussion programmes. The impact has been positive on the farmers. The researcher analyzed only research question 2 and 4, and then tested the hypothesis.

Research question 2 stated, does voice Fm radio Nsukka disseminate agricultural information to farmers in Umashi village? As it was stated on the table 1, 270 or 70.13% respondents affirmed that they listen to voice fm agricultural discussion programmes while 115 or 29.87% respondents said No that they do not listen to it.

They said that because radio set is affordable and can make use of batteries, most of them have a radio set and this has made them to always be glued to the agricultural programmes on Voice Fm radio Nsukka. Majority of the respondents were of the view that they have learnt a lot of things since they started listening to agricultural programmes on Voice FM radio. They stated that they have acquired knowledge on the latest farming skills, new seedlings and fertilizer applications.

Research question 4 stated, does the impact that voice fm agricultural programmes have on the farmers in Umashi village positive? As shown on the table 2, 248 or 64.33% respondents answered yes that Voice Fm agricultural programmes have affected them positively while 92 or 23.90% respondents said No and 45 or 11.69% respondents were undecided.

The hypothesis tested states that voice fm radio has improved agricultural development of Umashi village. This hypothesis received statistical support which informed the rejection of the null hypothesis.

Summary of Findings

Major findings are summarized as:

- (i) Voice Fm Radio has to a large extent, had successfully impacted in the growth of agricultural in Nsukka zone.
- (ii) The major way Voice Fm Radio has been disseminating agricultural information to Nsukka zone farmers is through agricultural discussion programmes.
- (iii) Voice Fm has been able to promote the interest of farmers in Nsukka zone particularly Umashi village.
- (iv) The findings revealed that the impact voice fm has on the farmers in Nsukka zone is positive.

Conclusion

Based on the facts obtained from the respondents in Nsukka zone on the topic researched on, Voice Fm Radio (Eagle on the Hill) has been able to promote agriculture in Nsukka zone, mainly through discussion programmes. The impact has been positive on the farmers. Voice Fm Radio has been able to promote the interest of farmers in Nsukka zone, particularly in Umashi village.

Recommendations

In line with the findings of this research work, the researchers recommended the following

- (i) More agricultural programmes should be aired. This will continue to create awareness and improvement in the agricultural system.
- (ii) Voice Fm Radio should ensure that they consult experts and agriculture researchers in their agricultural programmes. This will expose the farmers to professionals and latest farming knowledge in agriculture.
- (iii) Voice Fm Radio should scarcity research to know the time that will be suitable for

the programme in order to carry everybody along.

- (iv) Voice Fm Radio should regularly air agricultural programmes, so that people who have not heard about it, will hear it.

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