

PRESENT STATE OF PERIODICALS AND OTHER SERIES  
PUBLICATIONS ON PHOTOGRAMMETRY AND REMOTE SENSING  
IN AFRICA WITH AN OUTLOOK INTO THE NEXT DECADE

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ABSTRACT

A survey of Periodicals and other series publications which carry articles on Photogrammetry and Remote Sensing in Africa is made. The frequency of articles on Photogrammetry and Remote Sensing in these publications is assessed.

A strong case is made for the establishment of an African Photogrammetric Journal to be preceded by a Newsletter which will be responsible for filling the existing communication gap amongst African Countries in the acquisition and dissemination of scientific knowledge related to Photogrammetry and Remote Sensing.

INTRODUCTION

At the 13th Congress of the International Society of Photogrammetry and Remote Sensing (ISPRS) in Helsinki, Finland in 1976, the concept of Regional International Periodicals (RIP) was discussed and adopted. Some of the reasonings and objectives for adopting the concept of RIP have been enumerated by Hothmer (1979). At the 14th ISPRS Congress in Hamburg, Hothmer (1980) presented a paper in which he discussed the rationale behind RIP. The Working Group VI/6 which was established after the Helsinki Congress, also prepared for the Hamburg Congress a set of guidelines for a statute applicable to RIP in Africa, Latin America, Northern America, Asia/Pacific, Eastern Europe and Western Europe. The Hamburg Congress also adopted a Resolution T.VI/5 which states thus: "noting the guidelines for the organisation and publication of regional international periodicals recommends that consideration be given to the possible implementation of regional international periodicals on photogrammetry and remote sensing", Int. Archives of Photogrammetry (1980). The objective of this paper is to give a report of a survey of periodicals and other series publications on photogrammetry and remote sensing in Africa with a view to assessing the possible implementation of RIP for this region.

SURVEY OF AFRICAN JOURNALS AND PERIODICALS

A survey of journals and periodicals which cater for Photogrammetry and Remote Sensing was conducted in 30 African countries. Only ten of these countries responded to our questionnaires. The results of part of the survey are summarised in Tables I and II.

Table I consists of national journals in Africa which carry articles on Photogrammetry and Remote Sensing while Table II conveys information about existing Regional International Periodicals (RIP) which publish Photogrammetry and Remote Sensing articles. It is clear from Tables I and II that journals published by Land Surveyors, Geodesists, Geographers/ Cartographers and Engineers have varying degrees of interest in Photogrammetry and Remote Sensing. This phenomenon may be depicted diagrammatically as shown in Fig. I. Apart from journals published by Photogrammetrists, other journals do not show any major interest in photogrammetry and remote sensing articles. Fig. I describes in descending order of magnitude the varying degrees of interest shown by some African Journals in Photogrammetry and Remote Sensing. It is interesting to note that Journals of Land Surveyors have more interest than those of Geodesists while Geographical/ Cartographic journals are more favourably disposed towards Photogrammetry and Remote Sensing articles than Engineering journals. (see Fig. 1).

Tables I and II also portray the scarcity of journals in Africa which cater for photogrammetry and Remote Sensing. The only journal devoted solely to photogrammetry and Remote Sensing is The Nigerian Photogrammetric and Remote Sensing Journal. This is a new periodical whose maiden issue will be launched sometimes in 1984. From frequent references made to it in the literature, The South African Survey Journal also appears to have a great deal of photogrammetric articles, but unfortunately the author could not obtain any information on this journal. It is sad to note that in some countries only Engineering journals cater for Photogrammetry and Remote Sensing. The Nigerian experience is that Engineers have very little concern for surveying literature although surveying has its root in Civil Engineering. It is surprising to note that between 1962 and 1980 no surveying or Photogrammetric/ Remote Sensing article was published by The Nigerian Engineer (see Table I) in spite of the fact that the Nigerian Surveyors started their journal only in 1969. Engineering journals have very peripheral interest in photogrammetry and remote sensing.

Fig 2 depicts some interesting phenomena about frequency of articles. For example The Map Maker, The African Geodetic Journal, The Graduate Surveyor and The Nigerian Geographical Journal show that Photogrammetry and Remote Sensing articles are becoming more frequent in recent years than in the past. This certainly indicates the growing awareness of Africans in photogrammetry and Remote Sensing. It is also an indication of availability in recent years of more qualified personnel in these relatively new fields in Africa.

#### AFRICAN CONTRIBUTIONS IN SOME FOREIGN JOURNALS

Our survey reveals that very few articles have been published in African journals on Photogrammetry and Remote sensing. The question then arises as to where else Africans publish their Photogrammetric and Remote Sensing articles? The obvious answer is of course in proceedings of conferences and seminars and also in foreign journals. Since this paper is primarily concerned with periodicals some foreign journals have been selected for a close scrutiny. For example, Photogrammetric Engineering and Remote Sensing was chosen because of its world-wide appeal. ITC Journal and The Canadian Surveyors, were also selected because of their affinity to developing countries, as illustrated by the objective of The ITC Journal which is "to disseminate the knowledge in all scientific fields covered at ITC which has relevance for the developing countries". Tables III and IV show the result of our survey of some foreign journals. From Table III we know that

Africans have contributed from the point of view of Photogrammetry and Remote Sensing only about 1,3,4,3 percents respectively of the total number of articles published in Photogrammetric Engineering and Remote Sensing, The ITC Journal (Bulletin de l'ITC), Photogrammetric Records, and Photogrammetria. Unfortunately as of the time of writing there are no data on the famous German journal, Bildmesung Und Luftbildwesen (BUL) and the well known French journal, Bulletin de la Societe Francaise de la Photogrammetrie which may also contain some African contributions. It is not surprising that there are no African contributions photogrammetrically speaking, in The Canadian Surveyor, Surveying and Mapping and The American Cartographer.

Table IV shows that Nigeria, South Africa and Egypt are the only dominant countries making contributions to foreign journals. Also Table IV describes the numerical strength of the contributions of individual African countries to selected foreign journals. Although both Photogrammetric Engineering and the ITC Journal are relatively well known in Africa, the latter seems to have a wider geographical spread in popularity than the former (see Table IV).

Fig. 3 depicts the frequency of African contribution to selected foreign journals on an annual basis. It is obvious from Fig.3 (as shown also in Fig.2) that the annual frequency of African contributions to four foreign journals has been on the increase in recent years.

#### FUTURE OUTLOOK AND RECOMMENDATIONS

It can be concluded from our survey that some African scientists have been engaged in writing articles on Photogrammetric and Remote Sensing in both foreign and national Journals and that this has been on the increase in recent years. These articles range from purely scientific and theoretical nature to application to solving local or national problems. The question is whether there is a need for an African Regional International Periodical (RIP) in Photogrammetry and Remote Sensing in the foreseeable future? Judging from the result of our survey, the answer to this question should be yes, for the following reasons:

1. Our survey reveals that authors of all foreign journals selected for this study do not normally refer to African journals including the ones shown in Tables I and II except African authors themselves. This suggests that African journals are not known to foreign authors.
2. The African regional international journals in Table II have only peripheral interest in Photogrammetry and Remote Sensing and therefore do not meet African needs in this area.
3. There is enough African interest in some kind of regular publications. It is observed from Table V that all the respondents to our survey agree that there should be published either a News-letter or a Journal. About 70 percent of the respondents however prefer the publication of a journal preceded by a news-letter.

4. Such an RIP for Africa will fill existing communication gap amongst African countries in the acquisition and dissemination of scientific knowledge related to photogrammetry and remote sensing. It will also serve as a link between Africa and the rest of the world.

It is therefore recommended that the ISPRS should set up a special working group for photogrammetry and remote sensing research and publication, in Africa under the auspices of a special commission for photogrammetry in Africa whose activities and functions should embrace Education, Professional Practice, application, etc- (see Ayeni (1984) for details). The working group should publish a newsletter as a vehicle for disseminating the activities of the special commission. Such a newsletter will then form the basis for RIP on Photogrammetry and Remote Sensing in Africa. Potential members of the working group may be identified from countries which responded to our questionnaire and also from national societies within ISPRS, listed in Table V.

#### ACKNOWLEDGEMENT

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TABLE 1: SOME NATIONAL JOURNALS IN AFRICAN COUNTRIES WITH ARTICLES ON PHOTOGRAMMETRY AND REMOTE SENSING

NAME OF JOURNAL (COUNTRY)	PERIOD UNDER REVIEW	INTERVAL OF PUBLISHING (NO. OF ISSUES PER YEAR)	PRINT RUN	NO OF SUBS- CRIBERS	TOTAL NO OF ARTICLES	NO OF ART. ON PHOTOG. & REM SEN. (% OF TOTAL	FOREIGN JOURNALS MAKING REF TO THIS AFR. JOURNAL	MAIN PROFESSIONAL FIELD OF READERS
1. The Map Maker (Nigeria)	1969-81	2	500	500	51	5(10)	Photo, Eng RS	Land Surveyor
2. Nigerian Geographical Journal (Nigeria)	1970-82	2	-	-	182	8(4)	Photo, Eng RS	Geographers
3. Nigerian J. of Engr. & Tech. (Nigeria)	1978-82	2	400	400	47	1(2)	None	Engineers
4. The Nigerian Cart- ographer (Nigeria)	1984	1	300	300	16	1(6)	None	Cartographers
5. The Nig. J. of Photo & Rem Sensing (Nig)	1984	1	300	300	8	8(100)	None	Photogrammetrists
6. The Graduate Surv- yor (Nigeria)	1972-79	1	-	-	74	6(8)	None	Land Surveyors
7. The Nigeria Engineer (Nigeria)	1962-80	1	-	-	91	0(0)	None	Engineers
8. Sudan Engineering Soc. Journ. (Sudan)	-	2	-	-	-	Variable	None	Engr. & Surveyors
9. The Surveyor (Ghana)	1974-83	1	-	-	-	1	None	Surveyor
10. The U.S.T. Engr (Ghana)	1974-83	4	-	-	-	2	None	Engineers
11. Journal of Bldg and Land Dev. (Tanzania)	1984	-	-	-	-	0(0)	None	Engineers, Arch. Valuers & Surv.
12. South African Surv. Journal (S. Africa)	-	-	-	-	-	-	Photo, Rec Photo, Eng R.S.	Land Surveyors
13. News Letter (Centre for Surveying and Mapping) Kenya		4					None	Remote Sensing Experts
14. Rep. of Benin								
15. Lesotho								
16. Madagascar								

No journals or periodicals publish photogrammetric and remote sensing articles

TABLE II: SOME REGIONAL INTERNATIONAL JOURNALS WITH ARTICLES ON PHOTOGRAMMETRY AND REMOTE SENSING

NAME OF JOURNAL	PERIOD UNDER REVIEW	INTERVAL OF PUBLISHING (NO OF ISSUES PER YEAR)	PRINT RUN	NO. OF SUBSCRIBERS	TOTAL NO OF ARTICLES PUBLISHED	NO OF ARTICLES ON PHOTOGRAM., & REM. SENSING (% OF TOTAL)	FOREIGN JOURNAL(S) * MAKING REF. TO THIS AFRICAN JOURNAL	MAIN PROFESSIONAL FIELD OF READERS
1. African Geodetic Journal (Commission for Geodesy in Africa)	1974-78 1982	2	200	200	31	2 (6)	None	Geodesists and Land Surveyors
2. African Journal of Science and Technology (AINST RAIST)	1982-83	2	-	-	17	½ (3)	None	Engineers
3. East African Geographical Review	1964-78	1	-	-	102	1 (1)	None	Geographers

\* "Foreign Journals" refers to journals shown in Table III

- Information not available.

TABLE III; SOME FOREIGN\* JOURNALS WITH PHOTOGRAMMETRY AND REMOTE SENSING  
(P & RS) ARTICLES FROM AFRICA

NAME OF JOURNAL (COUNTRY)	PERIOD UNDER REVIEW	NO OF ISSUES P/YEAR	PRINT RUN	NUMBER OF SUBS- CRIBERS	TOTAL NO OF ARTI- CLES PUB- LISHED	NO OF ARTICLES AUTHORIZED BY AFRICANS IN P & RS(% OF TOTAL	MAIN PROFESSIONAL FIELD OF READERS
1. Photogrammetric Engineering and Remote Sensing (U.S.A.)	1970-83	12	-	-	1187	11(1)	Photogrammetrists
2. ITC Journal (Netherlands)	1973-83	4/5	-	-	400	10(3)	Photogrammetrists
3. Photogrammetric Records(Britain)	1969-70 1972-75 1978-81	2	-	-	140	6(4)	Photogrammetrists
4. Photogrammetric (Netherlands) ISPRS	1975-79 1981-82	6	-	-	107	3(3)	Photogrammetrists
5. Surveying and Mapping (USA)	1973-82	4	-	-	219	0(0)	Land Surveyors
6. The American Cartographer	1974-81	2	-	-	118	0(0)	Cartographers
7. Canadian Surveyor	1970-80	5/4	-	-	387	0(0)	Land Surveyor

\* with reference to countries outside Africa  
- information not available.

TABLE IV: AFRICAN CONTRIBUTIONS IN SOME FOREIGN JOURNALS

COUNTRY	J O U R N A L S			
	Photogr. Engr. & Rem. Sensing	Photogrammetric Records	Photogrammetria	ITC Journal
	1970-1983			
Nigeria	4	2	-	1
South Africa	5	4	2	-
Kenya	-	-	-	1
Egypt	2	-	-	2
Lesotho	-	-	-	1
Ethiopia	-	-	-	1
Gambia	-	-	-	$\frac{1}{2}$
Botswana	-	-	-	1
Tunisia	-	-	-	1
Morocco	-	-	1	$1\frac{1}{2}$
Total	11	6	3	10



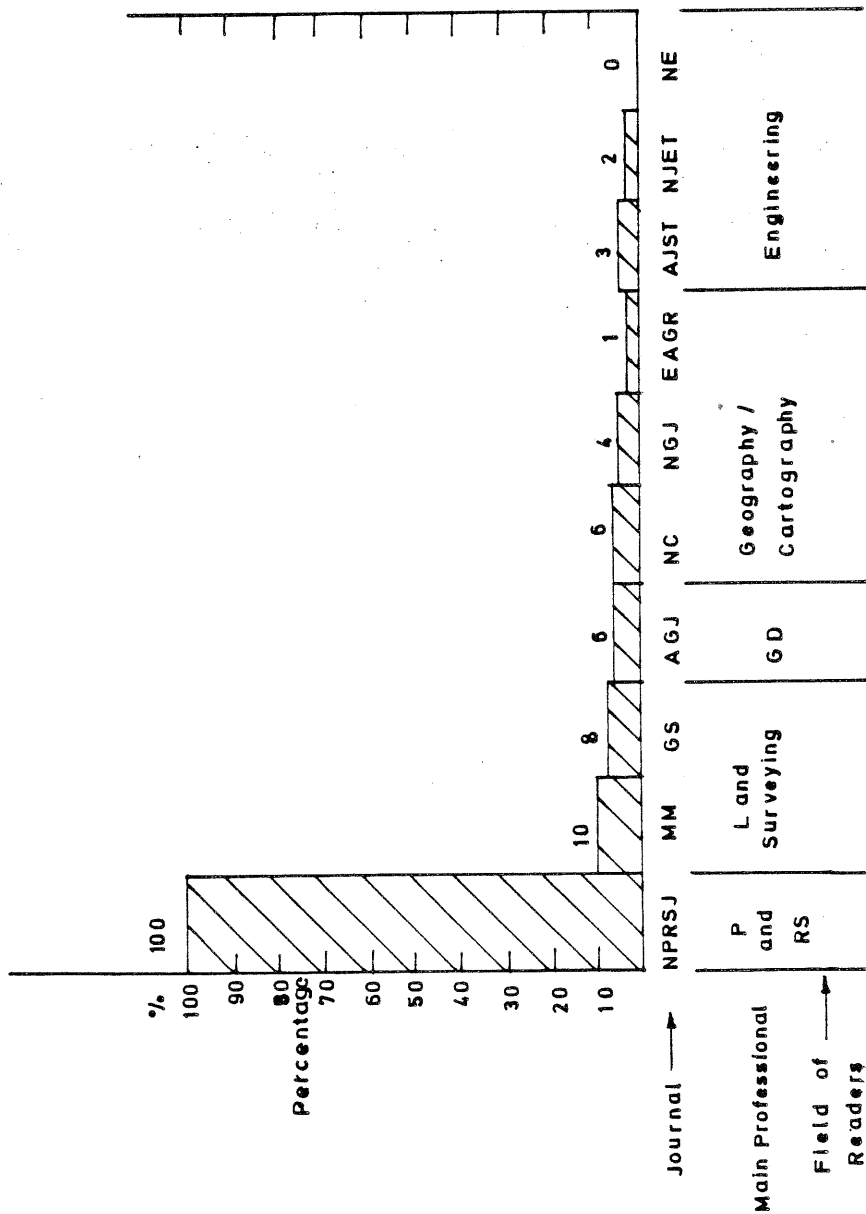
TABLE V: SOME PROFESSIONAL SOCIETIES/ORGANISATIONS WHICH CATER FOR PHOTOGRAMMETRY AND REMOTE SENSING IN AFRICA AND RESPONSES TO THE CONCEPT OF RIP BY THEIR MEMBERS

COUNTRY	NAME OF SOCIETY/ORGANISATION	MEMBERS' RESPONSE TO THE CONCEPT OF RIP		
		News Letter only	Journal only	Journal Preceded by New Letter
1. Lesotho	Lesotho Architects, Engineers and Surveyors Association	Yes	No	No
2. Tanzania	Institution of Surveyors of Tanzania (IST)	-	-	Yes
3. Kenya	Institution of Surveyors of Kenya	No	No	Yes
4. Ghana	Ghana Institution of Surveyors	No	-	No
5. Sudan	Sudan Society of Photogrammetry*	No	No	Yes
6. Nigeria	Nigerian Society of Photogrammetry and Remote Sensing*	No	No	Yes
	Nigerian Society of Remote Sensing	-	-	-
	Nigerian Institution of Surveyors	-	-	-
7. Republic of South Africa	Photogrammetric Society of S/A*	-	-	-
8. Egypt	Dept of Photogrammetry* Aerial Survey of Egypt	-	-	-
9. Uganda	Association of Surveyors of Uganda	-	-	-
10. Zambia	Land Surveyors Society of Zambia	-	-	-
11. Republic of Benin	None	Yes	No	-
12. Madagascar	Photogrammetry and Remote Sensing Association*	-	-	-
13. Algeria	Institut National de Cartographie*	-	-	-
14. Popular Rep. of Congo	Direction of Cadaster & Topography*	-	-	-
15. Libya	Department of Surveying* Ministry of Planning	-	-	-
16. Morocco	Conservation Fonciere Service Topographique*	-	-	-
17. Tunisia	Office de la Topographic et de la Cartographic	-	-	-

\*ISPRS Members

**LEGEND**

- P and RS = Photogrammetry and Remote Sensing
- LS = Land Surveying
- GD = Geodesy
- NPRSJ = Nigerian Photogrammetric and Remote Sensing Journal
- MM = Map Maker
- GS = Graduate Surveyor
- AGJ = African Geodetic Journal
- EAGR = East African Geographical Review
- NC = Nigerian Cartographer
- AJST = African Journal of Science and Technology
- NJET = Nigerian Journal of Engineering and Technology
- NE = Nigerian Engineer



**FIG. 1: PERCENTAGE ARTICLES IN AFRICAN JOURNALS ON PHOTOGRAMMETRY AND REMOTE SENSING**

No of articles  
(P and Rs)

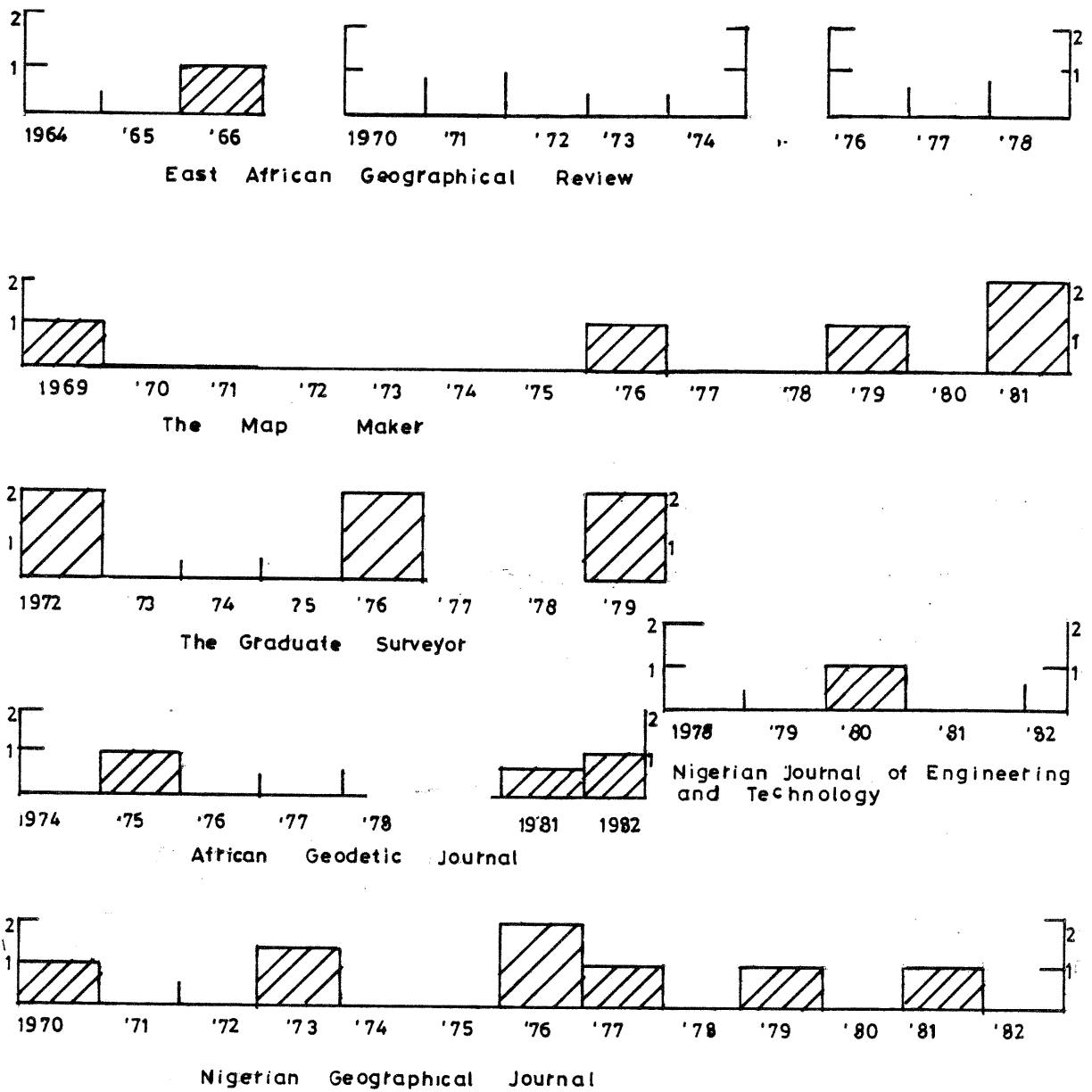


FIG.2: FREQUENCY OF ARTICLES ON PHOTOGRAMMETRY AND REMOTE SENSING (P and RS) IN SOME AFRICAN JOURNALS

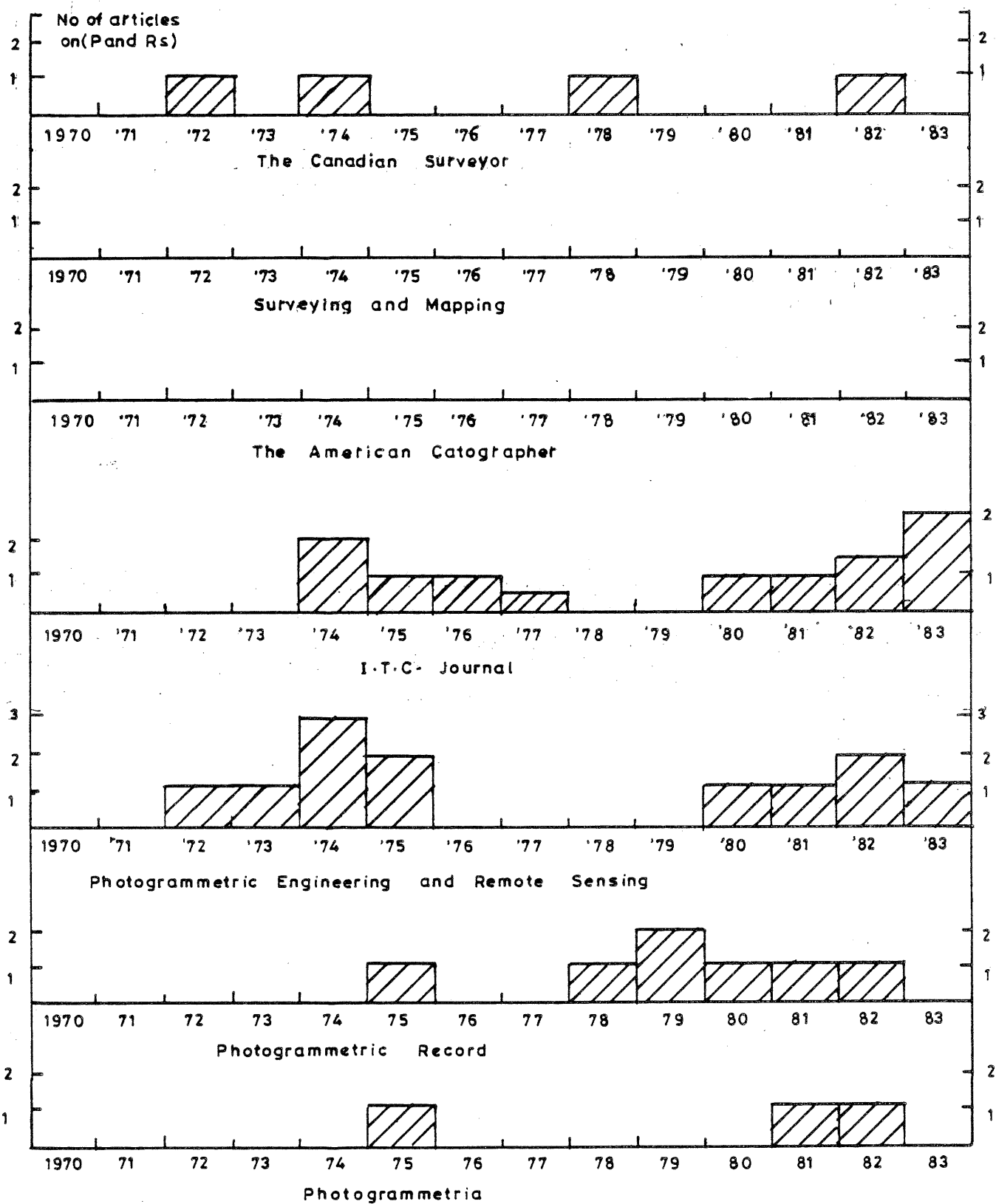


FIG-3: FREQUENCY OF AFRICAN CONTRIBUTIONS IN PHOTOGRAMMETRY AND REMOTE SENSING (P and RS) TO SOME FOREIGN JOURNALS