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**COPUBLICATION  
OF IRRI MATERIALS:  
A SURVEY  
OF TRANSLATORS  
AND PUBLISHERS**

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## COPUBLICATION OF IRRI MATERIALS: A SURVEY OF TRANSLATORS AND PUBLISHERS<sup>1</sup>

### ABSTRACT

We analyzed 116 non-English editions of International Rice Research Institute (IRRI) books that had been printed or were in press; 49 editions were analyzed through personal interviews of 40 translators and publishers in 12 Asian nations, and 67 were from Communication and Publications Department files.

At least 63 non-English editions of 19 IRRI books had been released in 25 languages by December 1984. Another 53 editions were in press. Two IRRI books designed to facilitate their copublication – *Field problems of tropical rice* and *A farmer's primer on growing rice* – accounted for almost 90% of the 680,600 non-English copies printed since 1973.

Translators initiated most copublication projects. Only half of the translators received payment. Most translators hold MS or Ph D degrees in agriculture and work with national research agencies or universities.

Farmers and extension agents are considered the main audiences of the non-English editions.

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## COPUBLICATION OF IRRI MATERIALS: A SURVEY OF TRANSLATORS AND PUBLISHERS

Language is a major barrier to the spread of knowledge. It is particularly a problem for agricultural development agencies such as the International Rice Research Institute (IRRI).

From 2,500 to 5,000 languages, and countless local dialects, are spoken worldwide (1). It is difficult and expensive for developmental organizations to publish in languages other than their working languages. Most international agencies (including IRRI) publish almost entirely in English. Although English is undoubtedly the *international* language of world science, only 10% of the world's population reads English (5).

Agencies wishing to have their materials published in other languages encounter the problem and expense of finding and hiring translators who are proficient in agriculture and science in two languages. Even after translation, the technical difficulties – typesetting, proofreading, layout – make publishing in romance languages, such as French and Spanish, inefficient, costly, and time-consuming. Publishing in Arabic, Chinese, or Korean is almost impossible for most agencies.

Thus, results of hundreds of millions of dollars invested in international agricultural research are directly available only to the top-level research community and government planners – because they are the only users who know English.

At a conference on the *Communication responsibilities of the international agricultural research centers* held at IRRI in 1979, professional communicators from international and national agricultural research centers discussed dissemination of agricultural technology in the Third World. Although participants did not discuss the language problem in detail, they observed that “Translation is an acute problem with no easy solution. . . . The Centers must come to grips with the problems of translation” (4).

In 1983, perhaps the first international workshop to focus specifically on the language problem in agricultural development was held at IRRI. The workshop on *Copublication: strategies for multilanguage publication in agriculture* was jointly sponsored by IRRI and Canada's International Development Centre (IDRC).

Workshop participants recognized the need to publish in other languages. “The language problem is a world tragedy” was the opening statement of Datus Smith, former director of the Franklin Books Program, a U.S. program to encourage the publication of English-language books in Middle Eastern

and Asian languages in the late 1950s and early 60s. (Appendix A summarizes the conference and key recommendations.)

IRRI recently surveyed 8,286 individual subscribers to IRRI publications; almost all indicated they use English, but 75% use it as a second or third language. This survey reinforced IRRI's decision to expand its copublication program.

### **IRRI's copublication program**

IRRI's main approach to the language problem has been through *copublication*, a term we use to mean any cooperative endeavor whereby IRRI, as the original publisher of a book or document, grants a second agency permission to translate, publish, and disseminate that publication in another language. IRRI does not ask for royalties or payment for translations of its books published in the Third World.

IRRI's most widely translated books – *A farmer's primer on growing rice* and *Field problems of tropical rice* – were designed in formats that make their copublication in non-English languages easy and inexpensive.

*A farmer's primer* is a 221-page book written by Dr. B. S. Vergara to help progressive rice farmers and technicians understand why and how improved rice varieties and farm technology increase production. The book is highly illustrated with minimal text and blank white space around the drawings, to allow lengthy translations and adaptations.

After printing the English edition, IRRI blocked off the text and reprinted the black and white illustrations. IRRI gives sets of the prints to national agencies and publishers who then translate the text, strip the translated material onto the illustrations, and print on local presses. By late 1982 we had copies of more than a dozen non-English editions of *A farmer's primer*, and we knew that another 20 editions were in production.

*Field problems of tropical rice* is a pocket-size booklet with 158 color photos to help rice workers identify common rice production problems such as insects, diseases, weeds, and adverse soils. The first English edition of *Field problems* was released in 1972. By 1983, 10 non-English editions had been copublished. A revised edition was published in late 1983. Within a few months, Filipino, Vietnamese, and Spanish editions had been published, and national agencies were translating *Field problems* into another 20 languages.

The text and color photos of *Field problems* are always on facing pages. No text is printed on pages with color photos. All color plates are on the same printing flats. Copublishers translate English text, typeset it to the same line and column length, then send the typeset translations to IRRI. We forward the text to the printer in Manila (who keeps the plates), granting permission to use our plates to print the non-English edition. The copublisher pays for the printing (3).

By 1983 IRRI was aware that dozens of translations of *Field problems* and *A farmer's primer* were being published. National agencies were obviously interested in copublication, yet we knew little about the process. Therefore, IRRI and the University of the Philippines at Los Baños initiated a research project to survey the translators and publishers of non-English editions of IRRI materials.

The objectives of the study were to:

1. measure the *multiplier effect* of copublication,
2. identify the translators and copublishers of IRRI books and their backgrounds,
3. determine factors that motivate national agencies to translate and copublish IRRI materials,
4. determine the target audience of copublished materials,
5. find out what channels are used to disseminate copublished materials, and
6. recommend techniques and strategies to facilitate and encourage the copublication of agricultural materials in many languages.

#### METHODS

A total of 116 records were analyzed -- 49 from questionnaires and 67 from Communication and Publications Department (CPD) files.

Primary data were gathered by in-depth interviews and mailed questionnaires from 40 translators and publishers from 28 agencies in 12 nations (Table 1).

Different questionnaires were designed for translators and publishers. Both questionnaires were used when a person was both translator and publisher. Thirty-seven translators and publishers of IRRI materials from 25 agricultural agencies and private publishing houses in 9 nations (Bangladesh, India, Indonesia, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, and Vietnam), were personally interviewed. Questionnaires were mailed to respondents in Colombia, Dominican Republic, and Malaysia.

Secondary data for 40 agencies in 24 countries that have copublished IRRI books were taken from IRRI records and correspondence. Most of the secondary data were used to measure the multiplier effect of copublication and for tabular relationships.

#### RESULTS AND DISCUSSION

##### Multiplier effect

##### Status of copublication

By December 1984, 116 non-English editions of IRRI

Table 1. Copublishing records analyzed.

Country	Records analyzed (no.)		
	From questionnaires <sup>a</sup>	From CPD files	Total
Bangladesh	3	0	3
Brazil	0	1	1
Burma	0	3	3
Canada	0	1	1
China	0	17	17
Colombia	1	2	3
Dominican Republic	1	0	1
Egypt	0	2	2
France	0	1	1
Guinea-Bissau	0	1	1
India	15	11	26
Indonesia	3	2	5
Iran	0	3	3
Japan	0	3	3
Korea	0	1	1
Liberia	0	2	2
Malaysia	1	0	1
Mexico	0	3	3
Nepal	2	2	4
Pakistan	3	0	3
Philippines	11	5	16
Sri Lanka	3	0	3
Tanzania	0	2	2
Thailand	3	1	4
Vietnam	3	4	7
Total	49	67	116

<sup>a</sup>From interviews of 40 translators and publishers in 28 agencies in 12 Asian nations.

books had been or were being copublished in 34 languages by 48 agencies in 25 countries (Table 2). At least 63 non-English editions of 19 IRRI books had been released in 25 languages (Table 3). About 21% of the translated IRRI books were in Chinese.

A total of 74 editions of *A farmer's primer* and the first and revised editions of *Field problems of tropical rice* had been or were being copublished.

Thirty-eight editions of 21 *traditional* (ie, not designed for easy copublication) IRRI books had been or were being copublished.

##### Number of copies by book title

Data on the actual number of copies printed of 71 copublished editions of 17 IRRI books were gathered through personal interviews and from CPD records.

At least 680,600 non-English copies of the 17 IRRI books were printed since 1973 -- more than 3 times the number (198,100) of the same books that IRRI printed in English for world distribution (Table 4).

*Field problems* and *A farmer's primer* accounted for almost 90% of the total non-English editions printed. IRRI printed a total of 140,000 English copies of those books.

*Rice improvement* had been published in Chinese, Korean, Spanish, and Vietnamese. A Chinese edition of *Fundamentals of rice crop science* had been published and Spanish, Vietnamese, and Japanese editions were in produc-

**Table 3. Languages in which IRRI books have been or are being co-published by 48 agencies in 25 countries (as of Dec 1984).**

Language	Books (no.)		
	Printed	In press	Total
Arabic	—	2	2
Bengali	3	1	4
Bahasa Indonesian	3	2	5
Bahasa Malaysian	1	—	1
Burmese	2	1	3
Cebuano	1	1	2
Chinese	13	4	17
Farsi	2	1	3
French	2	1	3
Gujarati	2	2	4
Gujarati-Hindi combined	1	—	1
Hindi	2	2	4
Hiligaynon	—	1	1
Ilokano	1	1	2
Japanese	1	2	3
Kannada	1	1	2
Korean	1	—	1
Malayalam	—	2	2
Marathi	—	1	1
Nepali	2	1	3
Oriya	1	1	2
Pampango	—	2	2
Filipino	3	1	4
Portuguese	—	2	2
Punjabi	—	2	2
Singhalese	—	2	2
Spanish	7	4	11
Swahili	—	2	2
Tamil	2	2	4
Telegu	2	2	4
Thai	2	2	4
Urdu	3	1	4
Vietnamese	4	3	7
Warai	1	1	2
Total	63	53	116

**Table 3. Status of publication of translated versions of 19 IRRI books (as of Dec 1984).**

Book	Non-English editions (no.)	
	Printed	In press
<i>Designed for copublication</i>		
Farmer's primer	21 <sup>a</sup>	14
Field problems (1st ed.)	10 <sup>b</sup>	0
Field problems (revised ed.)	5 <sup>c</sup>	24
Illustrated guide to integrated pest management	0	4 <sup>d</sup>
<i>Not designed for copublication</i>		
Production of seedlings	4 <sup>e</sup>	0
Rice improvement	4 <sup>f</sup>	0
Fundamentals of rice crop science	1	3 <sup>g</sup>
Other IRRI books	18	8
Total	63	53

<sup>a</sup>Bahasa Indonesian (2 editions), Bahasa Malaysian, Burmese, Cebuano, Chinese (2 editions), Farsi, French, Gujarati, Ilokano, Kannada, Nepali, Oriya, Pilipino, Spanish, Tamil, Thai (2 editions), Urdu, Warai. <sup>b</sup>Bengali, Bahasa Indonesian, Burmese, Hindi, Nepali, Pilipino, Tamil, Telegu, Urdu, Vietnamese. <sup>c</sup>Pilipino, Vietnamese, Spanish, French, Bengali. <sup>d</sup>Bahasa Indonesian, Chinese, Farsi, Vietnamese. <sup>e</sup>Gujarati, Hindi, Telegu, Gujarati/Hindi. <sup>f</sup>Chinese, Korean, Spanish, Vietnamese. <sup>g</sup>Chinese, Japanese, Spanish, Vietnamese.

**Table 4. Number of copies printed of 71 translated editions of 17 IRRI books.**

Title	Copies printed			
	Non-English		English	
	No.	%	No.	%
Farmer's primer	183,600	27	10,000	5
Field problems (1st ed.)	191,000	28	100,000	50
Field problems (revised ed.)	214,500	32	30,000	15
Major weeds	10,000	1	5,000	3
Other IRRI books	81,500	12	53,100	27
Total	680,600		198,100	

tion. Two Chinese editions of *Climate and rice* had been published. *Upland rice* was published in Chinese and Spanish.

Research agencies published more than half of the translated copies (Table 5).

At least 71,200 copies of 13 editions of 10 IRRI titles have been printed in Chinese (Table 6).

#### Role of translators as links

Translators seem to have initiated most copublication projects. In 69% of 36 copublished IRRI books, translators contacted the publishers, either before or after translation, and proposed the projects (Table 7).

Most of the translators hold MS or Ph D degrees in agricultural extension or communication, crop science, plant breeding, and agronomy (Table 8). More than half of the translators are affiliated with national research organizations and about a fourth, with universities.

Money was not a motivating factor for most translators; about half of the respondents translated the IRRI books with no financial remuneration<sup>2</sup> (Table 9). Those who were paid usually received an honorarium or token fee averaging US\$107.

Respondents regarded being the translator of a respected scientific book as a form of scientific recognition; the translator's prestige increases with the prestige of the author and the book.

The translator was acknowledged in 18 of 36 non-English books. The translator's name, when acknowledged, appeared on the cover of 10 of the 18 local editions (Fig. 1).

<sup>2</sup>Data on translation fees from China were omitted from the survey because China's system differs from that of other Asian countries.

Translation seems similar to authorship in China. Publishers often buy the translations at a relatively high rate, ranging from \$1.50 to \$2.50 per 1,000 Chinese characters of scientific text.

But the publisher's rights extend only to a particular translation — other publishers can purchase and publish their own translations of original books.

For example, a Chinese publisher paid a translator about \$1,250 for an abridged translation of an IRRI book. A second Chinese publishing house later published 10,000 copies of its own edition (a different translation) of the same book (2).

**Table 5. Number of copies of translated editions of IRRI books printed, by type of organization.**

Type of organization	Copies printed	
	No.	%
Extension	54,000	8
Research	391,600	57
Private publisher	84,200	12
University	85,500	13
International research	60,300	9
Training	5,000	1
Total	680,600	

**Table 6. Number of copies of 71 translated editions printed in 29 languages.**

Language	Copies printed/In press	
	No.	%
Arabic	17,000	2
Bahasa Indonesia	28,000	4
Bahasa Malaysian	15,000	2
Bengali	236,000	35
Burmese	20,000	3
Cebuano	10,000	1
Chinese	71,200	10
French	5,500	1
Gujarati	4,000	<sup>a</sup>
Gujarati Hindi combined	2,000	<sup>a</sup>
Hiligayon	5,000	1
Hindi	16,000	2
Ilocano	2,000	<sup>a</sup>
Kannada	4,000	<sup>a</sup>
Marathi	1,100	<sup>a</sup>
Nepali	15,000	2
Oriya	16,000	2
Pampango	3,000	<sup>a</sup>
Farsi	12,000	2
Pilipino	35,000	5
Portuguese	5,000	1
Spanish	9,000	1
Swahili	6,000	1
Tamil	8,000	1
Telegu	6,000	1
Thai	11,000	2
Urdu	30,000	4
Vietnamese	85,000	12
Warai	2,000	<sup>a</sup>
Total	680,600	

<sup>a</sup> Less than 1%.**Table 7. Pattern of copublication of 36 non-English editions of IRRI books, 1973-83.**

Pattern	No.	%
Publisher decided to copublish then commissioned translator	8	22
Translator contacted publisher before initiating translation	14	39
Translator contacted publisher after translation	11	30
IRRI staff contacted translator	3	9
Total	36	

**Table 8. Demographic data on 26 translators of IRRI books that have been, or are being, copublished in non-English languages.**

Item	%
Education	
BS	31
MS	27
Ph D	42
Discipline	
Ag. Extension/Communication	35
Ag. Economics	4
Education	8
Plant Breeding	27
Agronomy	11
Crop Science	15
Employed by	
National research organizations	54
Extension organizations	15
Universities	23
Training organizations	4
International research organizations	4

**Table 9. Payment for translators of 54 non-English editions of IRRI books.**

Title	Translators				Average payment (US\$)
	Not Paid		Paid		
	No.	%	No.	%	
Field problems of tropical rice (1st ed.)	3	50	3	50	<sup>b</sup>
Field problems of tropical rice (revised ed.)	6	55	5	45	78
Farmer's primer	11	39	17	61	119
Other IRRI books	3	33	6	67	100
Total	23	43	31	57	107

<sup>a</sup> Translators who received an honorarium, fee, or token payment specifically for translating a book were classified as *paid*. Those who translated books for the agency in which they were employed, but received no monetary payment except their regular salaries, were classified as *not paid*. <sup>b</sup> Translators did not remember rate of payment.

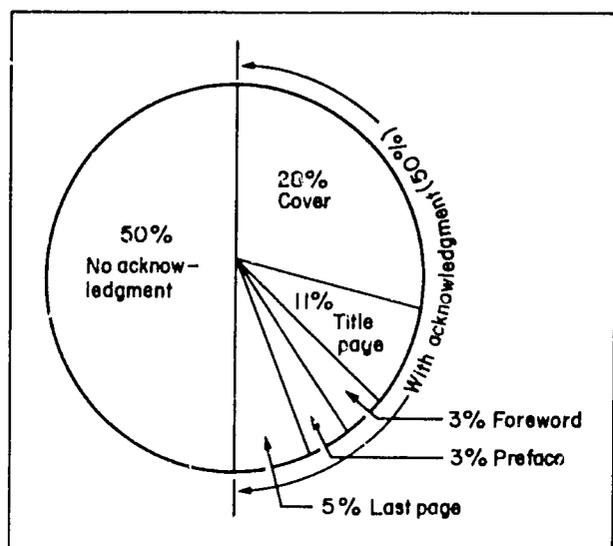
Translators who were not acknowledged personally were mostly affiliated with government agencies, which were acknowledged.

### Role of publishers

The publishers were the agencies (noncommercial and private) who financed and arranged the editing, typesetting, layout, printing, and dissemination of the translated IRRI materials.

About 32% of 43 non-English editions were published by national research centers and 23% by private firms (Table 10). Most translations of *A farmer's primer* and *Field problems* were published by research or extension agencies.

The private sector may have a greater role in copublication than these data reflect. IRRI's traditional contacts have been with research and extension agencies; IRRI recently began to make contact with the private sector. Also, IRRI's policy has been to grant first copublication rights to national research and development programs.



1. Acknowledgment of translators' name in non-English editions of IRRI publications.

Table 10. Types of organization that published 43 non-English editions of IRRI books.

Type of organization	No.	%
National research	14	32
Extension	5	12
Private	10	23
Training	5	12
International research	4	9
University	5	12
Total	43	

#### Sales vs free distribution

About half of the total press runs of 37 translated editions were distributed free (Table 11). All copies of the non-English editions copublished by extension agencies were distributed free. Training and international research centers sold most of their copies at a price that would recover production costs. Most nonprofit publishers felt the books should be distributed free but lacked the funds. For example, a national training organization in India with a self-sustaining publication program sold translations to trainees (mostly farmers and out-of-school youth) at production cost. Several private publishers indicated that they publish certain agricultural materials, and sell as cheaply as possible, because of a sense of social responsibility.

The price of translated books averaged about one-third the price of IRRI's English editions in developing countries, which reflects a 60% discount on the price for highly developed countries (Table 12).

Almost all IRRI books copublished in China were sold – but at about 10% of IRRI's price. Most Chinese editions were abridged.

#### Promotion and distribution

Almost all copies of 37 copublished IRRI books were distributed within the publishers' countries.

Table 11. Percentage of distribution of 37 copublished editions of IRRI books, by type of organization.

Type of organization	Distribution (%)	
	Free	Sold
Research	52	48
Extension	100	0
Private publisher	0	100
University	50	50
Training	20	80
International research	20	80
Av <sup>a</sup>	49	51

<sup>a</sup>Calculated by dividing the total frequency for each distribution method by total number of respondents.

Table 12. Prices of original and translated editions of IRRI books.

Book	Price (US\$)	
	Original	Translated
Field problems (1st ed.)	0.75	0.60
Farmer's primer	2.40	2.65
Production of seedlings	1.20	0.50
Upland rice	1.80	0.37 <sup>a</sup>
Climate and rice	6.60	0.35 <sup>a</sup>
Rice improvement	3.30	3.12
Rice breeding	4.70	0.34 <sup>a</sup>
Soils and rice	6.60	0.87 <sup>a</sup>
Av	3.42	1.27

<sup>a</sup>Chinese editions only.

Publishers considered radio and TV announcements the most important channel for promoting translated books, followed by extension agents.

Commercial publishers have their own distribution channels but they encourage cooperation with nonprofit agencies, particularly extension, for promotion because of their direct farmer contact.

Commercial and noncommercial publishers believe in cooperative distribution efforts but are generally not practicing them. Noncommercial publishers used noncommercial outlets almost entirely (which means the translations were not available in bookstores and other general public outlets). Commercial publishers distributed through bookstores and other commercial outlets.

#### Printing of translated editions

About 75% of 46 copublished IRRI books were printed locally – either on in-house presses or by commercial printers. Sixty-four per cent of the non-English copies of *Field problems*, however, were printed in Hongkong or Manila because printing with the original color plates was inexpensive in those places.

All non-English editions of *A farmer's primer* were printed locally. The average cost of printing *Primer* local editions on a press run of 10,000 copies was \$1.06/copy. Noncommercial agencies indicated almost 50% higher manufacturing costs than private publishers. This is pro-

bably because private publishers use large commercial presses whereas research and extension agencies tended to use smaller, less-efficient, in-house presses.

Publishers indicated that almost 50% of the total manufacturing cost of local *Farmer's primer* editions was for paper.

Noncommercial publishers reported no translation costs. But translation expenses for private publishers (who usually hire translators from scientific institutions) were 15% of the total production costs.

*Choice of books for copublication*

Most publishers cited "importance of subject matter" as the main reason for the copublication of all IRRI books (mean rating of 5.8 on a maximum scale of 6.0) (Table 13). "Short, concise, not technical" was the second most important reason followed by "adaptable illustrations."

Although availability of illustrations and use of IRRI's color plates were rated low, we should point out that these are the main incentives – other than content – that IRRI offers to encourage local editions of *A farmer's primer* and *Field problems*.

More than half of the publishers preferred pamphlets for future copublication ventures; 13% indicated no preference as long as the subject matter is relevant and important in their regions (Table 14).

Table 13. Ranking and mean rating of reasons for choosing books for translation and copublication.

Reason	Mean rating <sup>a</sup>
Importance of subject matter	5.8
Short, concise, not technical	4.9
Adaptable illustrations	4.6
Easy to translate	4.3
Illustrations made available	3.9
Broad subject matter	3.8
Author's prestige	3.7
Specific subject matter	3.2
Available financing	2.4
Available color printing	2.0

<sup>a</sup>Weight of 6 for reason rated as first, 5 for reason rated second, etc.

Table 14. Educational materials considered most likely to be translated and copublished by 31 respondents in different types of organization.

Type of organization	Organizations preferring educational materials (%) <sup>d</sup>			
	Books	Pamphlets	Flyers	No preference
Research	30	60	40	20
Extension	0	60	80	20
Private publisher	100	83	0	0
University	43	57	28	0
Training	0	0	0	100
International research	50	0	50	0
Av	42	58	35	13

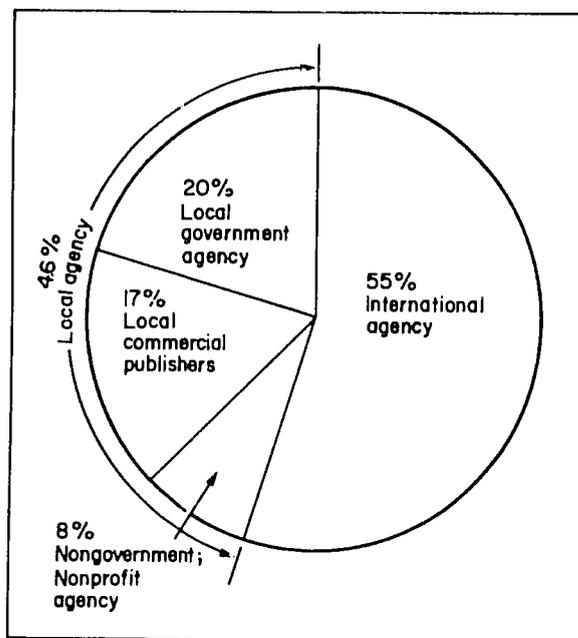
<sup>d</sup>Percentage totals more than 100% because some respondents preferred more than one type of material.

Private publishers preferred to translate and copublish technical books because their main clientele are scientists, students, and professionals with high education levels. But research and extension agencies preferred farmer-level materials such as pamphlets and flyers.

Some respondents indicated that pamphlets are more appropriate because farmers spend little time reading, and books tend to scare farmers.

*Mean time lag*

The mean time lag from IRRI publication of 12 books in English and publication of their translations was 3.5 yr. Funding was crucial in the time lag even though international agencies ultimately funded more than half of 24 copublished IRRI books (Fig. 2). Most of the non-English editions of *Field problems* (printed abroad, which requires hard currency) were internationally funded. Most editions of *A farmer's primer* (local printings) were published with local funds.



2. Source of funds for the copublication of 24 translated editions of IRRI titles.

*Modifications and adaptations*

Some changes (other than language) were made in the format, illustrations, or text of 38 editions. The cover was changed in 82%, illustrations in 23%, number of pages in 18%, and book size in 23% (Table 15).

Among the changes in *A farmer's primer*, the most significant were the illustrations of farmers, particularly on the cover. Most changes gave the farmers (drawn by Filipino artists) local features and dress. Publishers explained that they wanted local farmers to identify with the book.

A few copublishers deleted or replaced segments of *A farmer's primer* they considered too technical for local farmers or irrelevant to local conditions.

Table 15. Changes in thirty-eight translated IRRI books.

	With change		No change	
	No.	%	No.	%
Cover	31	82	7	18
Illustration	23	61	15	39
Text	16	42	22	58
Pages	18	47	20	53
Size	23	61	15	39
Color	19	50	19	50

Some translated editions of *A farmer's primer* were longer than the English edition because copublishers included glossaries, forewords, recommendations, and lists of translations of English terms.

Some copublishers used a larger page format for their local editions of *A farmer's primer* because the translated text was longer. Decisions to publish in a smaller format were based on local availability of paper.

Copublishers made some revisions in translated versions of *Field problems*. The original IRRI cover was changed only in the Bahasa Indonesian edition.

The main changes in copublished editions of other IRRI books were abridgement and on covers. Although *Field problems* and *A farmer's primer* were seldom abridged, other IRRI books averaged 95 fewer pages than the original English editions (Table 16).

#### Acknowledgment of the original publisher

Twenty of the 24 translators felt the original publisher should be acknowledged in the translated edition.

IRRI was acknowledged as the original publisher on the cover of 73% of 30 copublished editions (Table 17).

Table 16. Changes in the number of pages of original and translated editions of IRRI book.

Book title	Pages (no.)		
	Original	Translated	Difference
Field problems	94.0	93.8	0.2
Farmer's primer	221.0	210.4	10.6
Other IRRI books	288.6	193.3	95.2

Table 17. Place of acknowledgement of the original publisher in 30 non-English editions of IRRI publications.

Place	Respondents	
	No.	%
On cover and title page	13	43
Cover only	8	27
On cover and back of title page	1	3
Title page	3	10
Back of title page	3	10
Introduction	2	7
Total	30	

But 60% of the respondents indicated they preferred acknowledgment of the original publisher on the title page, 15% preferred a joint imprint on the cover, 15% in the introduction, and 10% on the back of the title page.

#### The audience

Most translators and publishers considered farmers and extension workers the most important target audiences of translated IRRI materials (ratings of 4.5 and 4.2 on scale where 5.0 is highest) (Table 18). Extension workers, farmers, and students were the three most important audiences of *Field problems* and *A farmer's primer*. Researchers and students were major targets of more technical IRRI books, which are often used as references.

Eighty-five percent of the respondents indicated only 0-10% of farmers in their areas were fluent in English, 13% said 11-20% were, and 2% estimated 21-30% of farmers were fluent in English.

Extension workers generally hold high school or undergraduate degrees and thus are often assumed to have English fluency. But the respondents perceived that only 40% of undergraduate, 23% of high school, and less than 10% of primary and middle school instruction in their regions was offered in English.

#### Communication with IRRI

IRRI publicizes its copublication program through several channels, including announcements in IRRI publications and regional and international newsletters, participation in international bookfairs, correspondence, and personal contact with scientists and publishers.

Sixty-seven percent of the copublishers learned about IRRI's program to encourage copublication through personal contact with friends, colleagues, and IRRI staff. A third of the copublishers learned about it through announcements in IRRI publications and correspondence.

#### Reaction to policies

IRRI policies on copublication have been made flexible to fit specific needs of various publishers.

Table 18. The mean ratings of target audiences of non-English editions of IRRI books as perceived by translators and copublishers.

Target audience	Mean rating <sup>a</sup>				
	Field problems	Farmer's primer	Production of seedlings	Other IRRI books	All
Farmers	3.9	4.7	5.0	3.6	4.5
Extension workers	4.6	4.1	3.0	4.0	4.2
Students	3.4	3.2	4.0	4.3	3.5
Researchers	2.7	2.7	0	4.5	2.9
Teachers	2.0	2.7	2	3	2.3
Policy makers, administrators	2.5	2.5	1	0	1.7

<sup>a</sup>Scale: weight of 5 for target audience rated as first, 4 for target audience rated as second, etc.

Copublishers of IRRI materials were asked to react on a scale of 1 (strongly disagree) to 10 (strongly agree) to 9 policies that IRRI has followed or is considering. The copublishers generally agreed with IRRI's policies, except on pricing of copublished editions (Table 19). IRRI policy is for the copublisher to sell the translated edition at a price not higher than IRRI's Third World price for the English edition. Many copublishers considered this policy unsound because production cost is the main factor in determining the consumer price of a book and that cost varies in countries and regions. Copublishers felt that IRRI policy discourages those who must sell local editions for cost recovery or profit.

Agreement was highest on the policy that IRRI should offer the first copublication rights to national agricultural programs but that it should encourage offers from private publishers if those programs are not interested. Private publishers felt that copublication offers should be open to all to ensure rapid action.

IRRI's policy of not charging royalties or payment for translated editions in developing nations was highly acceptable. National agricultural programs felt that royalties or fees would discourage copublication. Private publishers, however, felt royalties may be charged, provided they are

reasonable enough to keep the consumer price low. Private publishers were willing to pay royalties if IRRI would help in promotion by encouraging local government agencies to purchase or promote the local editions.

Fifty-two percent of the respondents felt IRRI should not give exclusive rights to any copublisher (Table 20) because it would inhibit information dissemination.

Copublishers also reacted to various forms of financial aid to help support publishing expenses.

An IRRI initiative to seek limited donor support of 50% matching funds would be highly acceptable, particularly to private publishers (Table 21). Most national programs felt that finding the other 50% matching funds would be a problem because their fixed budgets do not include such projects.

Another draft policy was for IRRI and the copublisher to shoulder costs of free distribution. Copublishers agreed to this policy at a 7.3 level. Some copublishers suggested that IRRI fund all costs of the first printing, and the copublisher reimburse part of the cost to IRRI as it sold the press run. The copublishers would be free to sell for cost recovery or profit. Reaction to a policy of copublishers paying back matching funds in the form of royalties, if the translated edition is sold, was similar.

Table 19. Reaction of publishers to policies on copublication by different types of organization.<sup>a</sup>

Policy	Type of organization						
	Research	Private publisher	University	Training	Government extension	International organization	All
Royalties or fees will not be charged for editions translated, published, and distributed in developing nations.	9.8	8.3	9.1	10	9.5	6.5	9.1
First copublication rights will be granted to national research and development programs; if these programs are not interested offers from private publishers will be welcomed.	9.7	5.0	8.1	3.0	9.6	6.5	8.9
Accuracy of translation must be confirmed by a respected scientist, fluent in the language of the translation, before publication.	8.4	9.6	9.3	9.0	7.6	9.0	9.3
Copublishers will not charge local consumers a price higher than the converted U. S. dollar price of the English edition in that country.	7.8	3.0	4.7	3.0	9.3	9.5	6.8
The copublisher should inform IRRI of important data such as number of copies printed, prices for each printing, and reprinting, of the translated books.	9.0	9.8	9.4	9.0	6.2	9.0	8.6
IRRI will assist copublisher in promoting the non-English editions.	8.8	10.0	7.9	9.0	8.8	9.0	9.2
The copublisher must indicate on the cover that the translated material is a joint venture between IRRI and that publisher; the phrase "International Rice Research Institute" must appear on the title page.	8.0	9.3	9.0	9.0	7.5	9.0	8.4

<sup>a</sup>Score of 10 for strongly agree, 1 for strongly disagree.

**Table 20. Reaction to a suggested policy that IRRI would give exclusive rights to a single agency for non-English editions of specific IRRI publications.**

Type of organization	Agreed		Did not agree	
	No.	%	No.	%
Research	4	80	1	20
Extension	2	22	7	78
Private publisher	4	57	3	43
Training	0	0	1	100
University	0	0	1	100
International research	2	100	0	0
Total	12	48	13	52

The copublishers did not agree that they should continue royalty payments to IRRI beyond the 50% matching funds because, they said, this would increase the selling price of the books.

#### CONCLUSION AND RECOMMENDATIONS

Three types of agencies play a role in the copublication of agricultural materials: national agricultural improvement programs, private publishers, and international agencies.

These organizations share a common objective -- the transfer of agricultural technology. Each type of agency can add its own expertise in a coordinated effort to alleviate the language barrier. Most international agencies want their materials translated and published in many languages. National agencies seek relevant materials in languages used by their clientele -- farmers and extension workers.

An agency can encourage copublication by:

1. Planning the publication to suit the needs of its

intended users. Simple, specific publications that can be easily adapted to the needs of farmers and extension workers are most likely to be translated. The preparation of such materials should be planned in close coordination with national agencies.

2. Designing publications to make them easy and inexpensive to translate and copublish. Copublication of *A farmer's primer* was obviously encouraged by the use of highly illustrative materials with minimal text and by making sets of the black and white artwork, with the English text blocked off, available free. Cooperators expressed a desire for still shorter, simpler pamphlets (8-20 pages) that are inexpensive to translate and reproduce for farmers. Copublishers suggested that books be sectionalized so that each section can be translated and published as a *stand-alone*.
3. Adjusting policies to encourage copublication. The granting of exclusive rights to private publishers is a key policy issue. Private publishers were often keen to copublish *A farmer's primer* and *Field problems* but would not because national agencies were already distributing their own translations for free or at reproduction cost.

Continued availability of translated editions is a major advantage of cooperation with private publishers. The national agencies, particularly extension, probably distribute more copies than the private sector but they often lack systematic channels of distribution. Initial distribution may be widespread but free copies are no longer available once the initial stock is depleted.

**Table 21 Reaction of different types of organization to IRRI policy to offer subventions for copublished materials.<sup>a</sup>**

Policy	Research	Private publisher	University	Training	Government extension	International organization	All
IRRI will seek donor support in the form of 50% matching funds for the translation and manufacturing costs, for certain local editions of IRRI materials in languages other than English.	8.6	10.0	8.3	8.0	8.0	9.0	8.6
If the material is published by a national agricultural agency for free distribution, IRRI and copublisher will each contribute 50% of the translation/manufacturing costs. Distribution cost will be borne by the national agency.	7.2	5.0	8.6	9.0	6.7	9.5	7.3
If the material is to be sold IRRI will provide 50% matching funds. The copublisher will then pay back half of IRRI's matching funds, over time, on a royalty or percentage basis.	3.2	7.0	7.3	10	4.5	6.5	5.0
IRRI will seek further payment after the copublisher has returned 50% of the matching funds.	3.2	6.5	3.0	1.0	2.5	6.5	3.7

<sup>a</sup> Score of 10 for strongly agree, 1 for strongly disagree.

The private sector generally has better distribution channels -- plus a profit motive that assures continued availability of translated editions as long as demand is sufficient.

The national agricultural programs are better prepared to provide qualified translators who are familiar with agricultural terms in English and in local languages.

Because the translators, who have played the key role in copublication, are partly motivated by desire for scientific recognition, original publishers should encourage their prominent recognition. We feel that the translator's name should be printed on the cover of local editions.

Copublication requires much more coordination than publishing and disseminating materials only in English. For example, it makes little sense for agencies to translate and copublish materials locally in the same languages when one edition could serve several regions and reduce costs to all (ie, in Bengali for Bangladesh and West Bengal, India; in Spanish for Mexico and Honduras; in Tamil for Tamil Nadu, India, and Sri Lanka).

We feel that there is potential to vastly increase copublication through a network approach. Such a network might be held together by an international copublication newsletter in which publishers representing international, national, and private agencies can announce the availability of new materials for copublication, and other agencies can announce their willingness to translate and copublish. Periodic meetings in Africa, Latin America, Asia, and the Middle East could be forums for copublication problems and increase communication among all agencies with a stake in copublication. The wheat and rice germplasm testing networks coordinated by the International Center for Maize and Wheat Improvement (CIMMYT) and IRRI could serve as a model of global cooperation -- except that a copublication network would move information (instead of genetic materials) into various languages and countries.

Of course, the language problem is not specific to rice. Many agencies that have copublished IRRI materials would be equally receptive to copublication efforts with other international centers and agencies -- if they were aware of the farmer- and extension-level materials that those agencies publish, and if they knew that the agencies would be willing to cooperate. The multiplier effect of such a network would be greater -- and at decreasing proportionate expense -- if it served all agricultural publications related to development, or at least all published by the international agricultural research centers.

Similarly, the language problem is not specific to English. This paper is oriented specifically to the translation and copublication of English materials because it focused on IRRI books. An international network of agricultural agencies and private publishers could facilitate, for example, a Chinese pamphlet on wheat diseases being copublished in Urdu in Pakistan -- or vice versa -- without appearing in

English. But that will happen *only* if the Chinese and the Pakistani publishers communicate.

Returns from such a network could be substantial -- but it would depend on cooperation of international and national agencies for the systematic communication, translation, copublication, and dissemination of materials in the languages used by farmers and extension workers.

Such a network could not be a side job -- it would require a full-time coordinator and budget. Perhaps donor support for such an activity could be found. But that would require a concerted effort among the potential users of the network -- those agencies whose mission is to increase the dissemination of improved agricultural technology in developing nations.

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#### Appendix A. Proposal for an international network for multilanguage agricultural publishing.

A global network to facilitate the transfer of agricultural knowledge from one language to another was proposed by more than 60 communication specialists at an international workshop 28 Nov-1 Dec at the International Rice Research Institute (IRRI).

The workshop on *Copublication: strategies for multilanguage publication in agriculture* was perhaps the first to focus on strategies to alleviate the language barrier in agricultural development. For the workshop, *copublication* was defined as cooperative endeavors whereby the original publisher of a book or document grants a second agency permission to translate, publish, and disseminate that publication in another language.

Workshop sponsors were the International Development Research Centre (IDRC) of Canada and IRRI.

The meeting attracted publishers, scientists, communication specialists, and administrators from national and international agricultural research centers, extension agencies, private publishing houses, and development groups in Asia, Africa, and Latin America.

Participants agreed that, when possible, ways would be found to facilitate the exchange of artwork and printed matter, tapes, and other materials. Cooperating publishers often must not only translate, but also modify and adapt materials to suit local priorities and needs. The group pointed out needs for the exchange of information across national borders on policies and methods to facilitate multi-language publication. Methods to accomplish these objectives include newsletter announcements of the availability of agricultural materials for translation; the publication of simple, inexpensive, and highly illustrated pamphlets and manuals for extension workers and farmers; participation in bookfairs; and communication research to evaluate the effectiveness of translated materials.

Such global exchange requires international cooperation, the group pointed out. A multilanguage communication network for agriculture was recommended.

A pilot project to test the feasibility of such a network was proposed and a steering group was formed to guide its implementation. Steering group members are Michael Graham, IDRC, Singapore; A. Jayusman, Bhratara Karya Aksara Publishing House, Jakarta, Indonesia; Ubaldino Dantas Machado, EMBRAPA (Brazil's national agricultural research agency), Brasilia; Hernan Rincon, International Potato Center, Lima, Peru; Mamadou Seck, Nouvelles Editions Africaines Publishing House, Dakar, Senegal; Richard Stewart, International Livestock Center for Africa, Addis Ababa, Ethiopia; Datus C. Smith, Jr., The Asia Society, New York, USA; Wang Pei-Lin, Shanghai Technical and Scientific Press, China; Keith Richmond, Food and Agriculture Organization, Rome, Italy; and Thomas R. Hargrove, IRRI, Philippines.

Funding to carry on the work will be sought.

## COPUBLISHED EDITIONS OF IRRI EDUCATIONAL MATERIALS

### Title

Adoption, spread, and production impact of modern rice varieties in Asia – Japanese

Brown planthopper: threat to rice production in Asia – Chinese

Climate and rice (2 eds.) -- Chinese

Cropping systems research and development for the Asian farmer – Vietnamese

A farmer's primer on growing rice

Published: Bahasa Indonesia, Bahasa Malaysia, Bengali, Burmese, Cebuano, Chinese (2 eds.), Farsi (Persian), French, Gujarati, Hiligaynon, Ilokano, Kannada, Kiswahili, Nepali, Oriya, Spanish (3 eds.), Tagalog, Tamil, Thai (2 eds.), Urdu, Waray

In Press: Arabic, Bicol, Hindi, Malagasy, Malayalam, Marathi, More, Pampango, Portuguese, Punjabi, Singhalese, Telegu, Wolof.

Field problems of tropical rice (1973 ed.)

Published: Bahasa Indonesia, Bengali, Burmese, Hindi, Nepali, Tagalog, Tamil, Telegu, Urdu, Vietnamese.

Field problems of tropical rice (1983 ed.)

Published: Bengali, Bicol, Cebuano, French, Ilokano, Pampango, Spanish, Tagalog, Thai, Vietnamese, Waray.

In press: Arabic, Bahasa Indonesia, Burmese, Chinese, Farsi, Gujarati, Kannada, Malagasy, Malayalam, Nepali, Oriya, Portuguese, Punjabi, Singhalese, Kiswahili, Tamil, Telegu, Urdu.

Fundamentals of rice crop science

Published: Chinese

In Press: Spanish, Vietnamese

History of IRRI

In Press: Chinese, Japanese

Illustrated guide to integrated pest management

In Press: Bahasa Indonesia, Chinese, Farsi, Vietnamese

Major research in upland rice -- Chinese, Spanish

Major weeds of rice in South and Southeast Asia – Urdu

Manual for testing insecticides on rice -- Chinese

Natural enemies of insect pests of rice

Published: Bahasa Indonesia, Bahasa Malaysia, Bengali, Bicol, Cebuano, Hiligaynon, Hindi, Ilokano, Maguin-danao, Pilipino, Tamil, Thai, Warai

In Press: Kannada, Telegu

Methodology for on-farm cropping systems research

In Press – Spanish

Principles and practices of rice production

In Press – Spanish

Production of seedlings – Gujarati, Gujarati/Hindi, Hindi, Telegu, Chinese

Rice breeding – Chinese

Rice garden

In Press – Gujarati

Rice Improvement – Chinese, Korean, Spanish, Vietnamese

Rice Improvement in China and other Asian countries – Chinese

Rice production training manual – Spanish

Rice production training module

In Press -- Thai

Rice research strategies in the 80's – Spanish

Rice virus diseases – Chinese

Soils and rice – Chinese

Standard evaluation system for rice – Spanish

Technical handbook for the paddy rice postharvest industry in developing country

In Press – French

Techniques for field experiments with rice – Chinese

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