INTRODUCTION[1]

Title of the work

The work, as we find it in the present edition, opens with a verse telling us that sage Parāśara is relating *Kṛṣi-karma-vivecanam*. This word appears to have been used only to denote agricultural operations in general, and not to indicate the name of the work. The colophon of our text names it as *Kṛṣi-parāśara*, and agrees with MS. D[a] in this respect. According to the colophon of the printed text, the title of the work is *Kṛṣi-saṃgraha*, while it has been named *Kṛṣi-paddhati* in the India Office MS., and *Kṛṣi-tantra* by Jogesh Chandra Roy in his Ancient Indian Life (p. 30).

Authorship and date

Both the title of the work and its colophon associate the name of Parāśara with it. There are many proofs of its high antiquity. In the first place, the versification throughout the work tends to prove that it belongs to a period anterior to the rise of the Nibandha literature which dates back approximately to the eleventh century A. D., if not earlier. None of the well-known Smṛti-digests or Nibandhas is written in verse though, of course, there are innumerable verses cited from various authorities. Again, the author of the present work cites only two authorities, viz., Manu and Gārgya, contrary to the usual practice of Nibandha-kāras whose works abound in quotations not merely from earlier works but also from contemporary ones. This is a singular feature which makes it probable that the work was composed before the rise of the Nibandhas. It may also be noted that the work is written in a fashion which is rarely met with in the Indian literature after the eighth century A.D., since when the attention of the Indian scholars has mainly been directed towards the exposition of the recogni-

1 For a detailed account of the work, its authorship, date, contents, etc. See S. C. Benerji in ABORI. Vol. XXXVI, 1955.

2 See under description of the MS.

sed Smṛti texts and to the preparation of digests and commentaries in the various branches of learning by reconciling divergent views and by giving the author's own conclusions. Hence, it will not, perhaps, be absolutely unreasonable to suggest a period earlier than the eighth century when the work might have come into being, i.e. in the period during which the original Dharma-śāstras were yet being composed. The reference to Gārgya in the work does not help us materially in fixing its date, because the date of Gārgya himself is as yet uncertain.

A good deal of difficulty arises from the name 'Parāśara.' If he be the same person as mentioned by Yājñavalkya in the list of traditional authors of Dharmaśāstra, the work then must be earlier than Yājñavalkya, and should be placed between 100 and 600 A. D. The work contains a citation of Parāśara as an authority—a fact which tends to prove the author to have been different from the well-known author of the Dharmaśāstra. But, the practice of the author referring to himself in the third person is not uncommon in Sanskrit literature.[3] Whoever this Parāśara may be, and whatever his date, the name is certainly very old.

Here a question naturally arises as to whether the author of the *Kṛṣi-parāśara* can be the same as the author of the well-known *Parāśara-smṛti* which is regarded as the highest authority in the Kali Age. While there are no external evidences on the matter, the internal evidences fail to prove anything conclusively. If both the Parāśaras are regarded as identical, it becomes difficult to account for the complete absence of verses from the *Kṛṣi-parāśara* or of any reference to it in the portion of the *Parāśara-smṛti* dealing with agriculture. It is idle to argue that the Smṛti only incidentally refers to agriculture, and that the lack of reference to the *Kṛṣi-parāśara* is merely accidental; because, the Smṛti devotes no less than about a dozen verses to this particular topic. On the other hand, it also seems a bit strange that the author of the *Kṛṣi-parāśara* does not refer to the chapters on agriculture contained in his own Smṛti work. Moreover, while the Smṛti dwells at length on the question of castes in relation to agriculture,

3 Cf. *prāyeṇa ācāryāṇām iyaṁ śaili yat svābhiprāyamapi paropadeśamiva varṇayanti*—Kullūka under Manu I. 4 (N. S. P. ed.)

the *Kṛṣi-parāśara* appears to be scrupulously silent on this point. Had the author of the latter been also the composer of the Smṛti work, he could have hardly resisted the temptation of putting in a word or two on the caste-duties on which Manu and other authoritative Smṛti works have given their definite opinion, and of which he himself has spoken a good deal in his own work. An evidence against the alleged identity of the two works is to be found in the difference between the rules, provided by the two, about the particular kinds of bulls to be rejected for the purpose of cultivation. According to the Smṛti, the bulls of the following descriptions are to be avoided.[4]

(1) *hīnāṅga* (deformed)
(2) *vyādhita* (diseased)
(3) *klība* (impotent)
(4) *kṣudhita* (hungry)
(5) *tṛṣita* (thirsty)
(6) *śrānta* (fatigued)

But, as shown below, the *Kṛṣi-parāśara* does not mention many of these kinds while adding many new descriptions. The *Kṛṣi-parāśara* lays particular stress on the colour of the animals, while the other work is silent on this point. Had the works been of the same author, we could not have expected such a difference of views.

One point is, however, significant. Though, in the Smṛti, Parāśara, in accordance with traditional ideas, has prescribed agriculture for non-Brāhmaṇas, yet he does not seem to be very keen about making the rule rigid in consideration of the importance of agriculture in daily life. As a matter of fact, Parāśara allows agriculture to Brāhmaṇas only under certain restrictions about the number of bulls to be employed by them; and certain atonements are to be undergone by them to wash off the sin of ploughing. This attitude of the author, which is not one of condemnation, may be supposed, though on very shaky grounds, to explain the complete absence of any reference to castes in the *Kṛṣi-parāśara*. It may as well be that the purely secular nature of the work on agriculture did not afford

4 Page 89 of the *Parāśara-smṛti*, Fasc. I, Ed. Dharmādhikāri, Benares.

any scope for the inclusion of the duties of castes. Hence, the identity of the authors of the two works may be possible. Among the minor points of agreement between the two, the number of bulls to be yoked together for cultivation deserves mention. In this respect, the striking similarity of the verses, found in the two, leads one to consider them to be of the same hand.[5] For the reasons, stated above, we cannot form any definite opinion about the identity of the authors of the *Parāśara-smṛti* and the *Kṛṣi-parāśara*. Some of the verses, found in the *Kṛṣi-parāśara*, are ascribed by Raghunandana to different authors—a fact which seems to throw some light on the date of the author of the *Kṛṣi-parāśara*. Some of these verses are attributed to the *Rājamārtaṇḍa* and others to Varāha. From certain literary evidences, P. V. Kane, in his *History of Dharmaśāstra* (Vol. I, p. 276), establishes that the *Rājamārtaṇḍa* was a book by King Bhoja of Dhārā. Certain fairly reliable evidences lead the same scholar to conclude that the date of Bhoja must have been between 1000-1055 A.D. From the references to these authors by Raghunandana, one cannot come to any conclusion as the borrowing might have been from these authors by that of the *Kṛṣi-parāśara* or *vice versa*, or both might have drawn upon a common source. If the author of the *Kṛṣi-parāśara* be supposed to be the borrower, he must have lived at least towards the end of the 11th century A. D. Had the borrowing been in the other way, the author may be reasonably supposed to have lived at least half a century before the rise of Bhoja, i. e. about the middle of the 10th century A. D. Whoever the borrower, as one of them must have been, one may, from these data, safely place the author of the *Kṛṣi-parāśara* in the period between 950-1100 A.D., a date which is certainly very old.

Inspite of many legendary accounts of Varāhamihira,[6] it has now been ascertained beyond doubt that he was a historical figure, and that he is one of the greatest authorities in Indian astronomical

5 *halam-aṣṭa-gavaṁ proktaṁ ṣaḍgavaṁ madhyamaṁ smṛtam /*
caturgavaṁ nṛṣaṁsānāṁ dvigavaṁ vṛṣa-ghātinām //

6 For details, see *Viśvakoṣa* and *Āmāder Jyotiṣi O Jyotiṣa* by Jogesh Ch. Roy, Calcutta, Śaka 1825.

sciences. Though there is some divergence of views among different scholars regarding his exact date, yet there seems to be a consensus of their opinions in placing him sometime between the 5th and the 6th century A. D. Even if the author of the *Kṛṣi-parāśara* be supposed to be the borrower in this case, the above may be the upper limit of his date. Conversely, if Varāha be the borrower, the date of our author must be placed in the early centuries of the Christian era. That Varāhamihira knew a Parāśara as an authority on Astronomy as well as on cattle-science is borne out by numerous prose quotations attributed to Parāśara in the *Bṛhatsaṃhitā*, and in verse 1, ch. 61[7] of the same work. Thus, inspite of the lack of conclusive evidence, we may say that the author was perhaps earlier than the 6th century A.D., and, by no means, later than the 11th. Jogesh Chandra Roy would, however, place Pārāśara's work on agriculture between the 6th and the 8th Century A.D. (p. 30).

Provenance of the work

If it is difficult to determine the date of the author of this work, it is no less so to ascertain exactly the part of the country to which he belonged. Here also we have no other alternative but to hazard a few conjectures from the nature of the author's treatment of the subject, from his language and also from certain customs and superstitions to which he incidentally refers. The first thing that strikes the reader is the mention of the bull as the only means of cultivation. It should be carefully noted that though various animals, as buffaloes, horses, etc. were used in ancient times and are being used even to-day in different parts of India for purposes of cultivation, yet the author mentions bulls as the only means. It may be pointed out that, now-a-days, in the major part of Bengal, only bulls are used for this purpose. This seems to hint at the Bengali provenance of the book. This argument, however, loses much of its cogency when we consider that, even in Ṛgvedic times, bulls are mentioned in connection with agriculture oftener than other animals. Among the agricultural implements is mentioned the "*madikā*" (or '*maiā*' = ladder), a word which

7 Cf. *parāśaraḥ prāha bṛhadrathāya golakṣmaṇam.*

is not to be found in the standard lexicons of the Sanskrit language, thus indicating that it is probably a *deśīśabda* or provincial term. Its equivalent, used in Bengal, is "*mai*" which is philologically a very easy step (*madikā*>*maiā*>*mai*), because the softening of these medial consonants is a well-known feature of the Prākṛta language (cf. *āgatam*=*āaam* in Māhārāṣṭrī Pkt.). The word "*paccanikā*" or "*prājanikā*" (goad) has a direct derivative in Bengal in the word "*pācan*' or "*pājan*". Another such Prākṛtism in the work is very significant. The term "*kaṭṭanam*" (derived from Skt. *kartanam*), meaning the cutting of paddy sprouts, used in the book, has the Bengali equivalent "*kāṭān*" which is chiefly used in some parts of Bengal in the same sense. The latter seems only to be a derivative of the former.

The customs of marking the cows with heated iron and of cutting the hairs of their bodies and tails, which are mentioned by the author, are still to be found in most of the interior districts of Bengal, and the practices have the same significance even to-day. Again, the practice of selling or, otherwise parting with, cowdung on Saturday and Tuesday (v.94), which is condemned in the work, is reprehensible even in the present-day Bengal.

The most remarkable feature of the book is that it considers agriculture as depending merely on rainfall (*vṛṣṭi-mūlā kṛṣiḥ sarvā*), and all forms of irrigation, resorted to in the areas of scanty rainfall, are conspicuous by their non-mention in the book. It can, by no means, be argued that the methods of artificially watering the paddy fields were unknown in ancient India, because, the Ṛgveda, the earliest Indo-Aryan work, and the *Arthaśāstra* of Kauṭilya, a fairly old book, mention quite a number of methods. The *Sukranīti*, also an ancient work on politics, refers to irrigation by means of tanks, wells and canals.[8] This seems to suggest that the *Kṛṣi-parāśara* described the conditions of Bengal, or, at least of the rice-producing areas of Northern India enjoying plenty of rainfall. It should not, however, be left unnoticed that the seasons, prescribed by the author for different

8 See *The Positive Background of Hindu Sociology*, by B. K. Sarkar, Allahabad, 1914.

kinds of the cultivator's duties at different stages of the growth of paddy, correspond almost literally with the actual practices prevalent in modern Bengal. The above facts tend to suggest that the book originated in Northern India, if not in Bengal,[9] though we cannot prove anything conclusively. This does not, however, necessarily mean that the author was an inhabitant of this part of the country.

Style and Language

Written throughout in verse, excepting a few *mantras* in prose, the book is very easy and affords a pleasant reading. Even if the book be held as a compilation, a supposition which is based on Raghunandana's ascription of certain of its verses to other works like the *Rājamārtaṇḍa*, yet, as a compilation, it has some outstanding features which at once distinguish it from the later prose compilations or digests. It has nothing of the needless and confusing elaboration indulged in by later writers, and its language is simple, its style charming. The

9 That fields were extensively cultivated in Northern India, particularly, in the region now called Bengal, and many crops, especially paddy, were largely grown from very early times is amply borne out *inter alia* by the following literary references:

(1) Mauryan Brāhmi Inscription of Mahāsthān (and. cent, B. C.)—the inscription records the grant of paddy to people.

(2) *Raghuvaṃśa* of Kālidāsa (c. 5th. cent. A.D.)—IV. 37 (*sikthāsaprasti-ropitāḥ kalamāḥ* hints at transplantation of paddy plants).

(3) Hiuen Tsang's account (vide Beal's Buddhist Records, II, 7th cent. A.D.): p. 194—"the soil is flat and loamy, and rich in all kinds of grain-produce"; p. 199.—"it is regularly cultivated, and is rich in crops"; p. 200—"it is regularly cultivated."

(4) *Rāmacarita* of Sandhyākaranandin (12th. cent. A.D.)—III. 27 refers to various kinds of paddy as the staple crop in parts of Bengal (cf. *bahudhānya-rāja-saṃbati-saṃbhāvita-kāmyarūpayā lakṣmyā* etc.).

(5) Āmulīā Copper-plate of Lakṣmaṇasena (1179-1206 A.D.).—V. 10—*kṣetraṅgha-puṇyāvalilīlāgbya* etc. *Inscriptions of Bengal*. Mazumdar, III. p. 85.

(6) Edilpur Copper-plate of Keśavasena (Accession 1225 A.D.)—V. 24—"These villages had smooth fields, growing excellent paddy." *Ibid.* p. 129.

author directly and clearly sets forth his views without entering into any recondite discussions of conflicting views which bewilder the readers of the later prose compilations. The book, however, cannot justly be regarded as a compilation though Raghunandana's ascription of some of its verses to other authors may give rise to such an inference. When we find Parāśara acknowledging the use of verses from Gārgya, and making such references as '*anye munayaḥ*', there cannot be any conceivable reason why he should have chosen to incorporate, without acknowledgment, the particular verses ascribed by Raghunandana to others. This is not the usual practice among the compilers who are, in a majority of cases, above the suspicion of plagiarism. The borrowing, if at all, might have been the other way about, or, both might have drawn upon a common source. Hence, no final verdict can be pronounced on the nature of Parāśara's work which may or may not have been a compilation.

Poetical merits of the author

The verses of the *Kṛṣi-parāśara* are mostly written in what is commonly known as the *Śloka* metre with occasional use of the metres *Indravajrā*, *Upajāti* and *Mālinī*. This variety of metres, in such a short space, speaks eloquently of the poetic merits of the author.

Contents of the work[10]

It opens with an eulogy of the author and of agriculture. Rice is then eloquently extolled as the principal source of strength and domestic happiness (v.v. 5-7). The influence of planets on agriculture and rainfall is dwelt upon in some detail. Then the clouds have been divided into four types, viz., Āvarta, Saṃvarta, Puṣkara and Droṇa, and the effect of each is described (v.v. 24-25). Next we find detailed and interesting methods of ascertaining the annual rainfall; the practical value of such meteorological forecasts has, of course, got to be tested. These are followed by an enumeration of the indications of immediate rainfall, such as, the rising of ants from their holes with

10 For details, see ABORI, 1955 (pp. 8-27). Here a rapid résumé only is given.

eggs, sudden croaking of frogs,[11] etc. as well as a statement of particular positions of the sun, the moon and the planets affecting rainfall.

Supervision of agriculture has been emphasised as indispensable for ensuring a good return, and, in this matter, no proxy is allowed whatsoever (v.v. 79-83)[12]. Bulls are an essential element in agricultural operations; as such, great care of, and humane treatment towards them have been strongly ordained. Certain rites, e.g., those to be performed in *Laguḍa-pratipat* in the month of Kārtika, are enjoined as they are supposed to be conducive to the health of cattle. Regarding the number of bulls to be employed, eight is the best and two the worst. One, who wishes the constant favour of the Goddess of wealth, should use ten ploughs. The possession of a single plough has been most vehemently condemned.

Cowdung as a manure has been highly extolled to the point of veneration.

The principal agricultural implements are the *hala* (plough) and *madikā* (ladder). *īṣā* (pole), *yuga* (yoke), *sthāṇu* (?), *niryola* (rod), *pāśikā* (rope), *aḍḍacalla* (pin of yoke), *śaula* (?) and *paccanī*: these are the eight accessories of the plough. Besides these, there are also mentioned *phāla* (plough-share), *viddhaka* (harrow), *yotra* (cord) and *rajju* (rope). In has been directed that the implements and their accessories should be of prescribed shape and measurement; otherwise, agricultural operations will be impeded at every step (v.v. 112-120; cf. *Amarārtha-kalpadruma*, Vaiśyavarga, sl. 37-39).

The author then lays down the effects of the commencement of ploughing on different days of the week and lunar days, etc. The commencement of ploughing must invariably be preceded by certain

11 Cf. *beṅ ḍāke ghana ghana|*
Śighra vṛṣṭi bave jena||Khanār vacan.

12 Cf. *khāṭe khāṭāy lābher gānti|,*
tār ardhek kāndhe chāti||
ghare vase puche bāt|,
tār ghare hā bhāt||Ibid

rites in order to ensure safety and bountiful returns. Definite rules, some of which appear to be superstitious, have been laid down regarding the choice of bulls. Black bulls are the best, black-and-red ones tolerable, and the all-white bulls are the worst.

In the next place are given some omens and portents. For example, the raising of a tortoise by the plough, in course of ploughing, forebodes the loss of the cultivator's wife, and the breaking of the plough portends the death of the master of the land. The bellowing of the bulls engaged in ploughing, or their licking of their noses (*nāsā-liḍha*), or their voiding dung, however, foretells a bumper crop.

Then we have the author's suggestions regarding the suitability of the soil for cultivation in different months. The soil is said to be like gold in *Māgha*, silver in *Phālguna*, copper in *Caitra*, and so on. Cultivation in the dewy season (*hemanta*) is held to yield the richest produce, while, at the advent of the rains (*ghanāgame*), it results in dire poverty.

Regarding seeds—their collection, preservation and sowing—detailed rules, which appear to be of great practical value, are laid down in the work. All seeds must be collected in *Māgha* or *Phālguna*. After drying them up in the sun, they should be kept in small bundles after separating the husk. Seeds of different classes must never be mixed up, and the grass particles should be carefully thrown away; the mixed seeds yield a poor harvest, and grass-particles in them result in the growth of weeds detrimental to paddy. The seeds, closely tied up, must not be allowed to come in contact with remnants of one's food, a woman in her monthly impurity, a barren woman, etc. They become useless by coming in contact with fire, smoke, rain-water and fish. For the sowing of seeds, *Vaiśākha*[13] is the best month, *Jyaiṣṭha* tolerable, *Āṣāḍha* bad, and *Śrāvaṇa* worst (v. v. 157-175). Of the lunar mansions and lunar days, some are bad for sowing while others are salutary. For averting damage to crops by locusts (*śalabha*) and rats, one should avoid sowing seeds on Saturdays and Tuesdays

13 Cf. *vaiśākher prathaṁ jale[,]*
āśu dhān dugun phale[]] Khanār vacan.

respectively. Sowing of seeds in *Ambuvāci*, when the earth is supposed to be unclean, is said to be dangerous. After the sowing is over, the cultivator must level the field with the *madikā* (=ladder; the *mai*[14] of present-day Bengal); otherwise the growth of the plants becomes uneven (v. 182). This part of the operations also, like the others, must be accompanied by certain religious practices. To seedlings for transplantation, the same prohibitions or recommendations concerning the days of the week, lunar days and lunar mansions, etc. as in the case of seeds, are also applicable. *Suci* (=*Jyaiṣṭha* or *Āṣāḍha*, according to some, and the hot season in general, according to others) is the best time for sowing seeds for transplantation[15] (v. 169). While seeds are free from defects (*doṣa-nirmukta*), seedlings may be beset with diseases (*sagada*). So, care must be taken to choose the right type of seedlings and those of mature growth must be avoided. Seedlings, transplanted in *Srāvaṇa*, should be one cubit apart from one another, in *Bhādra* half a cubit, and in *Āśvina* they should be four fingers apart (v. 185). *Ropaṇa* is forbidden in low lands. (v. 188).

For *kaṭṭana* or weeding out, and levelling the field after the seeds have sprouted up, the months of *Āṣāḍha* and *Srāvaṇa* are the most suitable.[16] Preservation of water in the field is an essential thing.

In *Bhādra*, an outlet for water should be made in the field in such a manner as would release the excess water; only as much water as is necessary for dipping the roots of plants should be allowed to remain in the field. (v. 193).

14 According to Dr. De, *mai* in cultivation does not signify ladder. It is a kind of appliance which is employed in making the hard soil powdered to dust. S. K. De, *Bāṅglā-Pravād*, Calcutta, 1359 B.S., p. 500, No. 4959.

15 *śrāvaṇer pur, bhādrer vāra|*
roo er madhye yata pāra||
vaiśākhi vonā, āṣāḍhi royā|
jāygā nā hay dhān thoyā|| Khanār vacan.

16 *āṣāḍhe kāḍān nāmke|*
śrāvaṇe kāḍān dhānke||
bhādre kāḍān śiṣke|
āśvine kāḍān kiske|| Ibid.

In this part of the work, there are some incantations, with the invocation of the assistance of Rāma and Hanumat, calculated to ward off all insects and pests causing harm to crops.

Nala-ropaṇa forms an important part of the cultivator's work. It consists in the fixing, at the prescribed time, of the plant, called *nala* (reed), with leaves at the north-east corner of the field. This is to be accompanied by the worship of the paddy plants.

This *nala* is supposed to avert all evils to paddy (v.v. 201-205). It is interesting to note that the practice of fixing poles of various designs in the fields in order to scare away mischievous birds and beasts still prevails in Bengal.

Before harvesting the crops, the owner of the paddy field must observe the rite called *muṣṭi-grahaṇa* on an auspicious day in the month of *Agrahāyaṇa*. This consists of cutting, along with a religious rite, of two and half *muṣṭis* or handfuls of paddy plants and carrying them to his house and placing them in the prescribed manner (v.v. 206-213).

Medhi-ropaṇa is another very important part of the business of the owner of the paddy-field. This consists in fixing a *medhi*[17] (=post) made of a prescribed tree in the *mārga*[18] on an auspicious day in *Agrahāyaṇa* (v.v. 214-220).

The ceremony, called *Puṣya-yātrā*, to be performed in Pauṣa near the field, should be performed when the harvesting is not yet over. In this ceremony, there should be the worship of Indra and a sumptuous feast with the kinsmen of the owner, consisting of various delicacies kept on banana leaves (*kadalī-dala*), the principal item being new rice (*navānna*). (v.v. 221-237).

The stage, following the harvest, is *mardana*, or the separating of the grains from the stalks. Then the grains of paddy should be

17 The exact purpose, served by the *medhi*, is not clear. In the text it is merely said to be conducive to the safety and growth of corns (*śasya-vṛddhi*—v.215; *śasya-sukha-pradaḥ* v. 218). R. Ganguli takes it to mean the post of the threshing floor round which cattle turn to thresh out the grains (*Agriculture and Agriculturists*, p. 65). But this meaning is not warranted by the text.

18 Does it mean the way to the owner's house from the paddy field?

weighed by standard weights (*pramāṇena tu māpayet*) before they are stored up in the granary on prescribed days. In the granary, one should place a piece of paper or any other writing material containing two incantations. The last thing to be done is the *Lakṣmipujā* (worship of the Goddess of wealth) which, therefore, marks the conclusion of the business of the owner of the paddy-field for the season.

From the foregoing survey of the contents of the work, we find that it divides itself into two broad parts, the one being speculative and the other practical. In the speculative part, we find various observations regading the influence of planets and stars on rainfall and the various agricultural operations. One may legitimately question the accuracy of these observations which, however, should not be rejected outright so long as they are not tested by competent persons in the proper scientific manner. In this part, we may include also the superstitious ideas, e.g., the touch of a barren woman rendering the seeds useless, the voiding of dung by a bull engaged in ploughing the field, foretelling a bumper crop, etc. The rites and ceremonies, associated with the various agricultural operations, may lead the modern agriculturist, with a scientific bent of mind, to brand the work as a priestly manual adding to the widespread sacerdotalism of ancient India. But, one must not lose sight of the fact that religious practices were closely interwoven into the texture of life of the ancient Indians so that even such practical things as agriculture could not escape the association of religious rites. The book undoubtedly contains very valuable instructions regarding the important business of agriculture; these instructions, shorn of the superstitious matters, the speculative astronomical observations and the religious practices, cannot fail to impress us even to-day. One feels tempted to pose the question—in this modern age, when the world is proud of various scientific achievements, what material advance has been made in the matter of collection, preservation and sowing of seeds, the collection and transplantation of seedlings, the preservation of water in the field, etc. the rules concerning which were laid down in remote antiquity by the author of the *Kṛṣi-parāśara*? One may bring the charge of special pleading when it is said that works like the present

one should be an eye-opener to those who decry the study of Sanskrit as having no practical utility. But the fact remains that many things of great scientific value lie buried in Sanskrit, and it is time that we dived deep into this literature and rescued the indigenous materials of national importance from unmerited oblivion and saw the India of our own in the proper perspective.