



Analysis on the Religious Consumption Expenditure of Farmers and Herdsmen in the Midland of Tibet

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Author's contribution

The sole author designed, analyzed and interpreted and prepared the manuscript.

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ABSTRACT

Aims: To estimate the market scale and characteristics of religious consumption in rural community in Tibet.

Place and Duration of Study: This study was conducted in 2012 in rural community in the Midland of Tibet.

Methodology: The present study is an applied research. Using field method and questionnaire, the data was collected from the desired sample, and it was later analyzed. In order to collect required data, 36 questions were designed in the questionnaire and were analyzed using ranking scale. The validity of the questionnaire was examined and confirmed both in terms of content validity and face validity. For data analysis, both descriptive and inferential statistics were used. Descriptive statistics were used for complementary analysis of the results. The methodology involved administering a questionnaire with structured and open-ended questions to informants in several communities who are conductors of the religious consumption and religious activities in the Midland of Tibet.

Results: The following constitute incredible market to the annual total expenditure of religious consumption: consumption of religious items (¥ 400~600), Daily consumption (¥ 800~1000), Seasonal consumption (¥ 700~900), Unexpected consumption (¥ 1000~1500), aims giving to the

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professional religious staff (¥800~1200). The total expenditure of religious consumption is about ¥3500~5000. The market scale of the above-mentioned religious items is about 200~300 million yuan in Tibet.

Conclusion: Religious consumption characteristic can be concluded in Tibet. The religious services is bought with cash payment, instead of other exchange patterns. The daily and seasonal consumptions are limited by budget, obey the “fixed-price of community market” and lack of elasticity. The unexpected consumption is the guidance of religious authority without controllable budget. The marginal benefit of religious consumption never declined and new consumer substitutes have appeared. The consumption level has a positive correlation with income level.

Keywords: Tibet; farmers and herdsmen; religious consumption.

1. INTRODUCTION

The previous research of religious needs placed more emphasis on philosophy, psychology and anthropology and sociology analysis. Some economists used economic analysis on religious consumption, brought economic analysis method in religious research, and tried to explain the religious needs by the demand theory. They believed that it's pity of economics to regard the religious needs as given conditions [1]. However, with the development of the economics of religion, this shortage was soon covered, and the concept of “treasure in the heaven” was put forward by economists. Corry Azzi and Ronald Ehrenberg were the first two men who brought the economic methods into religious research. They [2] believed there were at least 3 motivations of joining religious activities for individual. The first motivation is “save”, which means the individual thought the self-expectant consumption in the heaven is relevant to the religious consumption in their daily life. The second motivation is “consume”, which means people might be gain prompt satisfaction from the membership identification and religious activities since their inner religious belief or social influence. The third motivation is “social pressure”, which means that the membership identification and religious activities can increase the career opportunities in their life. Merely the first motivation is based on the future world in the heaven, which is also the most important religious motivation (that's because the second and the third motivation is based on the real life on earth, and can be achieved by other activities in daily life, such as joining a club and etc.). For most of the activities in real life, the individual “expected returns” will be ended with their death, but the consumptions in heaven will not be ended. Thus, the motivation of “saving” can only turn to religion, since most of the religions will promise the future world in heaven to their

believers. The satisfaction in heaven cannot be gained through activities on earth without the help of religion.

The contemporary seminal paper by Azzi and Ehrenberg, followed by Ehrenberg [3] and Sullivan [4], created the starting point for the most recent literature on this issue. This literature is typically based on Becker's theory of household production. Individuals allocate their time and goods among religious and secular commodities so as to maximize lifetime and afterlife utility.

After them, Jody W. Lipford and Rober D. Tollison also make a distinction of the returns for religion believers. The returns can be divided into two parts: “Treasure on earth” and “treasure in heaven [5]”. A religion believer had to face a “trade-off” problem between treasure on earth and in heaven. If a religion believer wants to gain the treasure on earth, he or she must take part in marketing activities; If a religion believer wants to gain the treasure in heaven, he or she must join religious events. Both the marketing activities and religious events need two kinds of “input”: time and money.

The article was based on a big amount of first hand data through long-term investigation of rural community in Tibet. By economic methodologies, the article would like to give an analysis on religious consumption expenditure of farmers and herdsmen there and hope to have a basic help to economic development in Tibet.

In the history of Tibet, the feudal serfdom system, native chieftain system and tribalism played an important role to the Tibetan society. These social systems were unifications of the state and the religion. Till today, Tibetan Buddhism is still a firm religion belief to most of the Tibetans, having a significant effect to the local society, economy, politics and etc. For the

rural households in Tibet, religious life is a very essential part in their daily life. Thus, behind the colorful religious activities, there is a series of religious consumption expenditure problems, such as the religious consumption scale, the proportion to their living consumption and etc. However, there are rare relevant research can be found. The characteristics of religious consumption and relationships with other consumptions occupy an important position to the living consumptions of rural household. Nowadays, even though there are few research results in the field of religious consumption expenditure of farmers and herdsmen in Tibet, many economics hold the opinion that religion is a very essential factor in the Tibet consumption research that cannot be ignored. Luo Li and La Can (2001, 50 years of Tibet: Economy Section) [6] gave a conclusion that the religion had a strong influence to the consumption activities and even consumption habit in Tibet. Di Fangyao, Introduction to Economics in Tibet) [7] believed that the Tibetan Buddhism played an important role in both productive process and living consumption process. Thus, the influence of religion can be found in the aspects of food, cloth, residence, transportation, marriage, wedding, birthday, funeral, social activities and etc. Sun Yong (Tibet: development and revolution under untypical dual structure) [8] held the opinion that 30% to 40% of the microeconomic activities and 90% of distribution in Tibet were inflected by religion. What's more, religion activities can occupy no less than 8% to 25% of daily commodities for people at the grass-roots level in Tibet. In addition, almost all the export sales in Tibet are composed by Tibetan religious article and services.

The author found 14 articles about "religious consumption" from CNKI. Among the 14 articles, 5 of them discussed the religious consumption from art development in Sui dynasty (A.D. 581-618), Tang dynasty (A.D. 618-907), Wei and Jin dynasties (A.D. 220-420), the Northern and Southern Dynasties (A.D. 420-589) and Qing dynasty (A.D. 1644-1911); 2 articles talked about the relationship between religion and consumption behaviors, and analyzed the influence of religion doctrine to the consumption direction and trends; 1 article paid attention to the religion consumption in literature works; 1 article analyzed the financial situation of Tibetan Temples with a case study of Gulei Temple. Besides, some articles analyzed the secularization of religious consumption of the Dai nationality in Yunnan province from the

perspective of social anthropology. Among the researched articles, there's no monographic study of religious consumptions of farmers and herdsmen in Tibet. Certainly, the sensibility of religion and deficiency of basic data are two important reasons. Among all the statistical information of governments at all levels, there's no statistics of religious consumption. Only the daily consumption part can be found in the Statistic Yearbook [9] in Tibet. The author paid highly attention to the problems and accumulated a large amount of first hand data during a very long-term field investigation of farmers and herdsmen in Tibet. Hereby, the author did an preliminary analysis of religious consumptions of farmers and herdsmen in Tibet.

2. BASIC INFORMATION OF SEVERAL COMMUNITIES AND METHODOLOGY

2.1 Basic Information of Several Communities

We selected the Chundui village in Linzhou county with an elevation of 3680 m as a field site, which is located in the 100 kilometers north of downtown Lhasa City. With an elevation of 3850 m, it belongs to semi-arid climatic type. The Zhaxilin village in Shannan county as a field site, is located in the central and southern of Tibet, the middle reaches of the Yarlung Tsangbo River, the 100 kilometers south of downtown Lhasa City. The Lunbugang village in Mozhugongka county with an elevation of 4000 m as a field site, is located in the middle of the Tibet autonomous region, the middle and upper reaches of the Lhasa river, the western of Mila Mountain, the 87 kilometers east of downtown Lhasa City. The Chabala village in Qushui county with an elevation of 3800 m as a field site, is located in the hinterland of the Tibet autonomous region, the down reaches of the Lhasa river, the north bank of the middle reaches of the Yarlung Tsangbo River, the 51 kilometers south of downtown Lhasa City. They all belong to semi-humid/semi-arid climatic type. The regions belong to agro-pastoral areas in river valleys in the Tibet Autonomous Region, whose production system is sedentary or pastoralist. They are agro-pastoral villages, which employ traditional Tibetan religious subsistence modes, and are neither among the poorest or richest of the midland of Tibet. They have the representative features fitting the purpose of this study. (see Fig. 1 & Table 1)

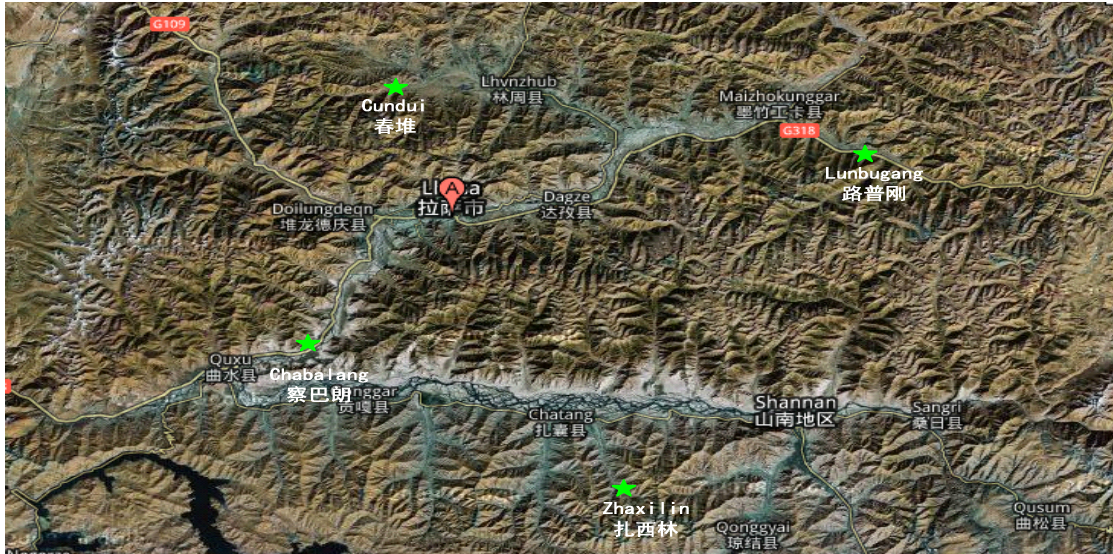


Fig. 1. Distribution of the four communities in the hinterland of Tibet (marked by green star)

Table 1. The basic information of several communities in 2012

	Number of population	Number of households	Average household size	Number of monks	Per capita net income(RMB)	Inward cash income (RMB)
Chundui village	636	102	6.23	13	5124	2109
Zhaxilin village	517	83	6.23	19	3500	1422
Lunbugang village	257	47	5.47	4	2400	908
Chabala village	560	105	5.33	0	3700	1590

Data resource: the number of population and households come from Statistic Yearbook of Tibet in 2013, other data are from the author's field investigation

This basic information of several communities came from the long-term tracking investigations since the year of 1996. The main investigation method was living under the same roof and eating at the same table with rural households in Tibet, establishing a trust relationship, and then interviewing each household from door to door. The investigation results showed that religious consumption was a very essential part of daily consumptions to almost all the rural households in Tibet. Of course, in some farming and pastoral areas, a few rural households of extreme poverty have little cash disbursement ability apart from labor services and leisure spending. Meanwhile, some rich rural households construct golden temples, bought luxurious religious items and organized a series of religion activities with a lot of money. However, the rural households of extreme poverty or wealth were the minorities with no more than 5%. Besides, as for the two kinds of households in four communities, their average value of religious consumption was in close proximity to the consumption level of

medium rural households in Tibet according to the statistic results. Therefore, this is an article aiming at the religious consumption of farmers and herdsmen on the base of middle-income group in communities in Tibet.

During the field investigation of several community, the author found the temples and communities have a special social relationship with interdependence and interaction. Temples are the religious entity beyond communities, and communities are the essential foundation of temples. The monks of temple are come from their local communities, thus, they are very familiar with the family economic status of the communities.

2.2 Methodology

The present study is an applied research. A preliminary investigation of several potential sites within the midland of Tibet was made, and on the basis of this investigation, the four communities

were selected as the study sites. They are agro-pastoral villages, which employ traditional Tibetan religious subsistence modes, and are neither among the poorest or richest of the midland of Tibet. Using a mix of such methods as in-depth and open-ended interviews, formal and informal interviews, key informants, participants observation, field research and questionnaire, the data was collected from the desired sample, and it was later analyzed. The questionnaire included consumption of religious articles, daily religious activities and relevant consumptions, seasonal religious consumptions, unexpected religious consumptions and the alms giving to the professional religious staff. Households were the core study unit, and all villages households were studied. The fieldwork was conducted in these villages from September 1996 to September 2014. However, any data were used in this paper were 2012 and 2013. In order to collect required data, 36 questions were designed in the questionnaire and were analyzed using ranking scale on niche for a statue of Buddha, figure of Buddha, Thangka, the Buddhist Scriptures, water bowl, oil lamp, prayer wheel, prayer rosary, censer thurible and etc. The validity of the questionnaire was examined and confirmed both in terms of content validity and face validity. CVR coefficient and Laveshe chart were used to examine the content validity. In order to determine content validity, related experts should comment on the questions. Therefore with regard to the subject, some monks and villages chiefs were considered as experts and were provided with researcher's attendance. 4 questionnaires were completed by monks and 8 questionnaires were completed by villages chiefs. According to Laveshe chart, for 12 expertise questionnaires, the least acceptable value is 0.68. All the results confirmed the content validity of the questionnaire. In examining face validity, based on 30 questionnaires that were responded in pre-test for reliability, some changes were made in the questions according to the testee's opinion reporting some items as ambiguous, confusing, or meaningless. For data analysis, both descriptive and inferential statistics were used. Descriptive statistics were used for complementary analysis of the results.

3. DISCUSSION: RELIGIOUS ACTIVITIES AND RELEVANT EXPENDITURES

In the worship of Buddha, Tibetans consecrate properties in front of a statue of Buddha, with the consumer attitude of "paying back". They believed that the Buddha was like human beings,

and unwilling to do the voluntary labor. Thus, the Buddha will not protect people unless people consecrate properties. That's the main cause of their religious consumption.

Results should be clearly described in a concise manner. Results for different parameters should be described under subheadings or in separate paragraph. Table or figure numbers should be mentioned in parentheses for better understanding.

The discussion should not repeat the results, but provide detailed interpretation of data. This should interpret the significance of the findings of the work. Citations should be given in support of the findings. The results and discussion part can also be described as separate, if appropriate.

3.1 Consumption of Religious Items

As for the households in the farming and herding areas and most of the towns, the necessary religious consumer durables include niche for a statue of Buddha, figure of Buddha, Thangka, the Buddhist Scriptures, water bowl, oil lamp, prayer wheel, prayer rosary, censer thurible and etc. Besides, each household will construct a "sang wo" (incense burner) on the roof or courtyard wall when building a house. Generally speaking, the statue of Buddha, Thangka and the Buddhist Scriptures were inherited from generation to generation and other items were all belong to consumer durables. Since the different economic conditions of households, the price and quality of their religious items have a tremendous difference. It is very hard to have an accurate estimation of average value. However, according the long-term field investigation and household interview, to most of the households, the total value of durable religious items is about 2000~5200 yuan (The total value= value of niche for a statue of Buddha+ value of figure of Buddha+ value of Thangka + value of the Buddhist Scriptures+ value of water bowl+ value of oil lamp+ value of prayer wheel+ value of prayer rosary+ value of censer thurible) with 20 years of usage on average. According to the straight-line depreciation rate, the depreciation per year is 100~260 yuan.

3.2 Daily Religious Activities and Relevant Consumptions

The aims of daily religious activities consist of accumulating capital in heaven, promoting social capital, gaining community status, finding self

confidence and sense of security. The good reincarnation and metempsychosis need the accumulation of religious consumption, daily worship with time, money, property and confirm belief.

The literal interpretation of “daily religious activities” means the religious activities from day to day. Taking an observation period of 1 year as an example, we found there are a great variety of religious activities and consumptions. However, for more than 95% of rural household in Tibet, the necessary daily religious activities are mainly as follows:

The first is “sang dang” (also called “wei sang” in some articles), which means to burn the branches of Chinese arbor-vitae, rhododendron parvifolium, *Artemisia argyi*, pine and roasted qingke barley flour in the “sang wo”, making white smokes in the air with good smell. In the southeast of Tibet and some areas under sufficient moisture condition, plenty of plants needed in “sang dang” grow in nature, and the local households can chop down some branches carried home with a few service payment. However, with the long-term deforestation, the aforementioned plants was on a big decrease, and some communities had to buy them in cash from the businessman or other places. According to the investigation statistics of the four communities, the daily expenditure per household is about 0.5 ~1 yuan, with 200~350 yuan per year.

The second is enshrining the Buddha with offering water. The water in worship is no difference with the drinking water, but the water bowl must be cleaned again and again. To most of the rural households, the cleanest bowl in the house was the water bowl in worship in front of the niche for a statue of Buddha¹.

The third is prayer wheels and prayer rosaries in hands. Chanting sutras is not the necessary daily religious activities, but each family number, especially the seniors will always have some leisure time. Even though there's no leisure time, seniors will chant sutras silently with prayer wheels or rosaries in their hand. During the interview in each rural household, once the interview takes more time, the author found the respondents will always chant sutras silently with

¹ Water bowls can be made of many materials, including aluminous, cupreous, metal ones. The rich families use silver, jade or even gold bowls for offering water to the Buddha. The water bowls must in odd number, such as 7 or 9 in common.

prayer wheels or rosaries while answering my questions. There are no cash disbursements in chanting sutras and the paragraph was only for the use of introduction.

The fourth is the lamps in worship in front of the niche for a statue of Buddha, which occupying a big part of daily religious consumption. In the past, the rural households use ghee as lamp-oil. However, the price of ghee has reached up to 50 yuan a kilo at present, and most of Tibetans had to find a substitute, which is a kind of edible oil imported from India², with a price of 8 yuan a kilo. The author asked the respondents jokingly, “Why you keep the expensive ghee for yourselves, but leave the cheap Indian oil for Buddha?” The answers are very different, but most of the Tibetans believed that “we are just expressing appreciations, and the Indian oil is still eatable.”

During the field investigations, more than 90% of rural households chose the lamps with lower oil consumption, and only a few rural households use the electronic lamps that brought from the market. The middle-income household consumes 2~3 kilos of ghee on average, with the expenditure of 200~500 yuan per year.

3.3 Seasonal Religious Consumptions

Seasonal religious consumption refers to the regular seasonal religious activities and the relevant consumptions.

According to the lunar calendar used by Tibetan, the 8th, 15th and 30th are important days for lighting lamps in each month. Households will replace the small oil lamps with bigger ones, even in the households that choosing electronic lamps, oil lamps will be used in the above-mentioned three days each month.

On the third day of Tibetans' New Year, each household will renew the prayer flag, costing 30~50 yuan. About 70% of households will go to the temples nearby to worship Buddha, and households near Lhasa will always go to the three famous temples in Lhasa. The worship contents include praying, alms giving, lamp

² The jokhang temple and the three big temples in Lhasa are the most popular temples in Tibet. There are many oil lamps offered by the pilgrims every day. Thus, a huge amount of bottom oil will be left and recycled every day. The temple will always put them in a big container, and sell them with cheaper price to the rural villages around, such as Duilong DeQing, Da Zi and Qu Shui villages.

offering, “wei sang” and walking on ritual path. Those activities caused cash and labor expenditure. If there’s a long journey, the household had to pay for the transportation expense.

Another important religious activity is dharma assembly at home. The times and expenditures are relevant to family economic situations. Several richest households hold dharma assembly at home 1 time per month, the richer households hold 3~5 times per year, the ordinary households hold 2 times per year, the poorer households held 1 time per year, and only the poorest households have no money for the dharma assembly at home. Many households choose to hold one time in spring, blessing for a good luck, and one time in autumn wishing for a good harvest.

The dharma assembly at home means that households invite the professional monks to their home, asking the monks to chant sutras and pray for the households. The numbers and rank of the monks are also related to the economic ability of each household. Most of the households will invite 2~3 monks from the nearby temples. The monks will not stay overnight. If the monks come from a temple in a long distance, the numbers of monks will be decreased to 1~2, and monks will stay overnight in the household. Theoretically speaking, the monks should not ask for alms, but each household will always entertain the monks with the best food. Interestingly, the alms and food quality have formed a unified standard in Tibet. The alms is about 20~ yuan, and the food are usually buttered tea and zanba for breakfast, 3 main dishes and a soup for lunch, and “tu ba” (broth with vegetables and dough ball) for dinner. The food expenditure for monks is about 25~30 yuan.

Besides, praying for the animal year (recurrent year in the twelve-year cycle) is also a kind of regular religious activities. According to the Tibetan culture, the animal year is believed as a hard year to that person. If a family member is in his or her animal year, the family will hold a series of religious activities for preventing the bad luck and wishing for peace and good fortune in the next twelve-year cycle. More than 80% of households will host a special dharma assembly at home for that family member, giving alms to the temple and making a dharma assembly at temple. In addition, the worship to the relevant guardian bodhisattva of the person and Buddha in big temples are also necessary contents.

Averagely, there’s 6.2 family members per household in Tibet in 2012 [9], which means that there will be a family member in his or her animal year no more than every 2 years on average. The religious activities and expenditure will be increased by this way.

In addition, several rich household would like to spend thousands yuan or even ten thousand yuan to invite the eminent monks or living Buddha to pray and chant sutras in their home.

Each year, most of the villages will hold a collective religious dharma assembly. According to the suggestions of community members, the community will invite the eminent monks to chant sutras with more pages.

The pilgrimage to the Buddha means that most of the rural households in farming or herding areas will go on a pilgrimage each year. Since the midland in Tibet is close to Lhasa, after the autumn harvest, rural households with no less than middle income will go on a pilgrimage to the three main temples in Lhasa. Very a few of poorest household can only go to the nearby temples for worship. In recent years, since the benefit farming policy and transportation development, the pilgrimage to the three main temples in Lhasa is becoming more convenient. The expenditure of average household (with middle-income) is about 400 ~600 yuan.

3.4 Unexpected Religious Consumptions

Man's fate is as uncertain as the weather. Once the unexpected disaster suddenly comes, the helpless human being would like to ask the supernatural power for help, religion becomes an inevitable choice.

If there’s a very strong natural disaster³, the temples will spontaneously organize a series of religious ceremony. The most frequent dharma assembly is chanting sutras with a large scale. The temples will also be invited to the villages nearby and holding particular religious events by request. According to the interview result, about 50% of the rural households would like to go to the temples to attend religious activities, or consecrate an oil lamp for the Buddha, or give

³ The common nature disasters in Tibet include hail, frost, flood, drought, snowstorm, debris flow, wind damage, earthquake and etc. Among them, hail, frost and snowstorm have the most serious influences to agriculture.

alms to the monks, or ask the temple to do a dharma assembly for the disaster-affected area.

It is worth pointing out that in the traditional Tibetan community, once a strong unexpected natural disaster happened, people think it's the "heaven's punishment" because of human being's offending and blasphemy to the heaven. Despite of the objectivity, people hope to find the self-mistake, especially the blasphemy to the religion.

If someone believes the disaster due to his or her own family, the person would like to invite the monks to make religious rites at home, so as to "clean the guilt". Those poorest families who cannot afford the religious rites had to be a pity. Generally speaking, monks will not negotiate a price before the religious rites and they will consider the real economic ability of the Tibetan households. If the household is suffering an economic hardship indeed, the monks will not accept the alms and even send oil lamps or other items to the household instead. The alms given by the believers are relevant to their own devout level. Even though there are no alms at all, the monks will not refuse to give the religious rites to the dead. Thus, the religious rites offered by the monks cannot be simply considered as "providing service" and the alms given by the believers are not equal to "payment".

If a family member is seriously ill, the family will always try to ask the power of religion for help. Firstly, the family will invite the eminent or trusted monks to their home, seeking divination for the patient. On the base of the result of divination, the family will be told to prepare relevant religious activities, such as chanting the specified sutras. According to investigation statistics, more than 80% of rural household would like to invite the monks to chanting sutras for the patient at home. The rich rural household will always giving alms to the temple and ask for a special religious rites in the temple at the same time.

Liberation for survival is also an important irregular religious activity. As a kind of Tibetan culture, liberation for survival is existed by different forms according to the economic ability, with the aims of praying for family security, expressing the gratitude of cattle and sheep, and protecting the environment. It is very common to see cattle or sheep moving freely in Tibet, wearing a three-colored ribbon on the neck. That is the liberation for survival.

As a kind of "living sacrifice", the cattle or sheep are offered to Buddha, Bodhisattva, spirit of mountain and spirit of war. These cattle or sheep live and die without outside interference, and people will not hurt or kill them. In the khampa area of Tibet, cook is the most common animal in liberation for survival. According the field investigation, liberation for survival is also a part of expenditure, costing 1000~8000 yuan on average (according to the current price on market).

In the traditional Tibetan society, people have a firm belief in religion, bearing disgrace and a heavy burden with compassionate heart. On essential reason is, in Tibetan Buddhism, people must suffer a period of "bardo" (the state of the soul between its death and its rebirth) in 49 days after death. Only by the help of religion, can the soul be released from purgatory, being reincarnated in a new body in a right way [10]. Thus, in Tibetans' mind, death is just the end of a body and the soul will be reincarnated. The reality life is short, but the reincarnation is endless. For a good reincarnation, almost all the households will endeavor every effort, and even expend a family fortune to hold a religious transgression ceremony for the dead. Firstly, the family must spend a sum of money to ask the eminent monks to seek divination for the death, and the monks will give a divination result according to the birth and dead time. The divination results always include the needed time, place, direction, form and sutras in the transgression ceremony. After that, the family will arrange a series of religious rites according to the guidance of the monks⁴. In most situations, the soul of the death will be laid at home for 3 days⁵. During that 3 days, the family will invite the monks to chant sutras regardless of day and night. Households with strong economy ability or social influence will make every effort to invite the living Buddha or eminent monks. However, to most of the ordinary rural households, it is just an untouchable dream. The numbers of invited monks is related to the ceremony scale and time. If the death is close to a temple, the household

⁴ Households in the outskirts of Lhasa always invite the experts of hospitals to seek divination. The households will offer a piece of khatag and 50 yuan to the experts.

⁵ According to the introduction of monks, the time and scale of religious rites for the dead is due to the person's live performance and mode of death. If the person is a kind person with faith religious belief, belonging to the natural death or accidental death, only 3 days' religious rites are needed. If the person is a bad person and killed by homicide, a longer time religious rites are needed, such as 4-5 days or even longer.

will always hold transgression ceremony in that temple. Most of the families will specially ask the relatives and friends to give alms in the three big temples in Lhasa. Besides, since the date of death, the family will light a big oil lamp for Buddha and the guardian bodhisattva of the dead. Rich families will buy the cupreous or even gold statues of Buddha; most ordinary families will buy the cheaper Thangka with the figure of the relevant guardian bodhisattva; and the poor families can only afford the cheapest paper figure of Buddha. This is the expenditure estimation of the series of religious rites for the dead in several communities as follows (see Table 2).

3.5 The Alms Giving to the Professional Religious Staff

In most areas of Tibet, there's a very close and special relationship between the temples and communities. The temples are the religious entities based on the communities; the communities are the necessary and developing basic of the temples. From the perspective of community, community plays a supporting role to the temple, which includes: Community provides the main human resource to religious staff in temple; community is the main economical source of religious activities in temple; community provides labor source to the construction of temples; the daily expenditure of religious staff (including food, cloth, accommodation and heating fee) is supported by their family. This is not only an indirect economic support to the temple, but also a necessary living basis of the religious staff in temple. From the perspective of temple, temples play a religious role to the community, which includes: Temples have the function of maintaining the believers' religious belief. On every occasion of holydays, believers' will pay religious homage in the temple; temples have the function of maintaining the believers' special psychological need. Birth, death, illness, old age, harvest and nature disasters are closely linked to people's daily life. Thus, to the believers of "dge-lugs-pa" of Tibetan Buddhism, it is very common to invite the monks to chanting sutras, finding spiritual ballast in the situations including funeral, illness, birthday and etc. Temple also has the function of developing religious staff. The modern education system of the community includes two part: The education in school and in temple. The education in temple is based on the religion knowledge, with a little proportion in the education system of the community. However, the education in temple is even stricter than in school. Apart from the

religion knowledge, monks must obey the disciplines including no killing, no marriage, no lying, no violence, no stealing, no robbing and etc. Through the education in temple, monks set up a good behavior standard, and gain the respect of the community.

To some communities, there's no temple around. These communities will make offerings to the professional monks, so as to take the place of temple. The relevant expenditure is also an important part of religious consumption, dividing into 4 kinds of consumption expenditures that above-mentioned. The alms giving to the temple construction and offerings to the professional monks are two main kinds of expenditure, which is also based on the different family economical abilities.

In comparison, the food expenditure of farm household is 1300-1600 yuan per year and the clothing expenditure of farm household is 300-400 yuan per year. It has a great gap with the total value of religious consumption.

4. RESULTS: THE MARKET SCALE ESTIMATION OF RELIGIOUS PRODUCT AND SERVICES

In the previous part, the article mainly introduced the religious consumption. Since the following part, we will estimate the annual total expenditure of religious consumption of Tibetan household, and the relevant market scale of religious product and services.

It is not easy to have an accurate estimation of the annual total expenditure of religious consumption of Tibetan household, however, during the long-term field investigation of Tibetan rural households (most of the investigated households are in the middle-income level in Tibet), here's a basic analysis as follows (see Table 3).

In brief, there are about 2300,000 farmers and herdsmen. According to family members per household in Tibet in 2012, there are 370,000 farmers and herdsmen households in Tibet, and the necessary religious items includes: niche for a statue of Buddha, figure of Buddha, Thangka, the Buddhist Scriptures, water bowl in worship, lamp in worship, prayer wheel, prayer rosary, censer thurible and etc. We made a simple estimation on total religious consumption. The rural households of extreme poverty or wealth

Table 2. The expenditure estimation of religious rites for the dead in several communities (unit of account: yuan)

Expenditure contents	Rich household	Ordinary household	Poor household
Divination	100~500	50~100	50
Religious rites at home	5000~10000	3000~5000	1000~3000
Religious rites in temple	2500~5000	1500~2500	100~1500
Alms given to the three big temples	2500~10000	1500~2500	100~1500
Statues of Buddha	5000~10000	500~1000	10~500
Oil lamps at home, "wei sang", prayer flags	1000~3000	500~1000	100~1000
Liberation of survival	8000~12000	3000~5000	1000~3000
Total (exclude the liberation of survival)	16100~38500	7500~12100	1360~7530
Total (include the liberation of survival)	24100~50500	10050~17100	2360~10530

Data resource: the author's long-term field investigation. According to data released by the world bank in 2008 and the socio-economic matrix of village life in contemporary Tibet, poor household's income is less than ¥2075, ordinary household's income is between ¥2075 and ¥12200, and rich household's income is more than ¥12200

Table 3. the annual total expenditure of religious consumption of middle-income rural households in several communities in the midland of Tibet(unit of account: yuan)

Consumption of religious items	Daily consumption	Seasonal consumption	Unexpected consumption	alms giving to the professional religious staff
400~600	800~1000	700~900	1000~1500	800~1200
Total: 3500~5000 yuan				

Data resource: the long-term field investigation in Tibet

were the minorities with no more than 5%. Their average value of religious consumption was in close proximity to the consumption level of medium rural households in Tibet according to the statistic results. Therefore, we estimate the market scale on the base of the religious consumption level of middle-income farmers and herdsman household in Tibet. The market scale of the above-mentioned religious items is about 148~222 million yuan (df=317, F=3.1, P<0.05). In daily consumption, the market scale of "sangdang" is about 74~129.5 million yuan (df=317, F=2.8, P<0.05); the market scale of ghee or other substitute for lamp oil is about 74~185 million yuan; the market scale of prayer flag is about 8~15 million yuan (df=317, F=2.3, P<0.05); and the market scale of other religious services is about 80~130 million yuan (df=317, F=3.6, P<0.05).

The estimation formula as follows:

Total consumption of religious items= farmers and herdsman household×consumption of religious items per household per year

Total sangdang's consumption= farmers and herdsman household×consumption of sangdang per household per year

Total consumption of ghee or other substitute for lamp oil = farmers and herdsman

household×consumption of ghee or other substitute for lamp oil per household per year

Total consumption of prayer flag = farmers and herdsman household×consumption of prayer flag per household per year

Total consumption of other religious services = farmers and herdsman household×the average consumption of other religious services per household per year

5. CONCLUSIONS: CONSUMPTION CHARACTERISTIC

5.1 The Religious Services is Bought with Cash Payment, Instead of Other Exchange Patterns

In Tibet, many types of work are bartered with labor or items, such as house construction, slaughter, husbandry, spring-sowing, autumn harvest, textile and etc. For example, if a household is building the house, other households in the community will come there to help. This is a trade-off between labor and labor, which means that when one is building the house, other villagers come to help; and when other villagers are building their houses, the one will also come to help. Another type is the trade-off between labor and items. For example, when one is busy with autumn harvest, another villager

come to help; therefore, after the autumn harvest, the one will give some grains to the helper. In the traditional Tibetan community, the items and services with high technical content are always consumed by cash payment. For example, during the house construction, the salary to artisan-painter is cash payment and others are bartered between labor and labor, or between labor and items. The religious service is regarded as a product with high technical content and scarcity. Thus, in the period of religious consumption, it is usual to buy the product or services with cash payment.

Certainly, the religious rites by the monks cannot be regarded as “service”, and the alms given by believers also cannot be equal to “cash payment”. The factor of religious belief cannot be ignored during the process. Generally speaking, monks will not negotiate a price before the religious rites and they will consider the real economic ability of the Tibetan households. If the household is suffering a economic hardship indeed, the monks will not accept the alms, some monks will even send oil lamps or other items to the household. The alms given by the believers are relevant to their own devout level. Even though there are no alms at all, the monks will not refuse to give the religious rites to the dead.

5.2 The Daily and Seasonal Consumptions are Limited by Budget, Obey the “Fixed-Price of Community Market”, and Lack of Elasticity

The regular consumption, such as daily and seasonal religious consumptions, has formed the local fixed-price. The price is directly relevant to the local economy level and amount of monks and temple. The religious consumption demand is not seriously influenced by the factor of price. The reasons are listed as follows: Firstly, in Tibetans’ mind, the expenditure of religious consumption is as a kind of necessity as highland barley noodles. Lacking of the religious consumption will not only bring the spirit in starvation, but also affect the “good fortune” in heaven, which cannot be ignored. Secondly, the “food of spirit” is always a kind of scarce resource. From the views of economics, the low consumption demand is not absolutely. If the expenditure of religious activities takes too much living resources and there’s substitute at the same time, the demand elasticity will be changed. However, the religious consumption is just in an enclosed environment without

substitutes. As a kind of spirit product, the temple of Tibetan Buddhism is the only “final seller”, providing the same kinds of service and product wherever in Tibet. In other words, the market of expenditure of religious consumption is in 100% of natural monopoly with a single product and a single seller. If there’s another product or seller in the same area, even though it’s the different branches of Tibetan Buddhism, it is unavoidable to have religious conflicts and even war.

5.3 The Unexpected Consumption is the Guidance of Religious Authority without Controllable Budget

The religious consumption of unexpected disaster do not have a controllable budget. Generally speaking, the consumption is in accordance with the “religious guidance”, which is seriously influenced by the cognition degree of religious authority.

In the years of unexpected disaster, the expenditure of religious consumption is 10~20 times than the years without unexpected disaster. For example, during the funeral of a family member, the ordinary family will invite monks to chant sutras for the dead in 49 days. The big expenditure makes many Tibetan families into poverty. According to the statistics, the payment to each monk per day is 20~30 yuan on average (the payment will be adjusted in accordance with the different family economic ability and the distance from the temple to the household). The monks will decide the standard of religious rites on the base of family economic situation. Thus, there’s a common phenomenon of “chanting short sutras in poor family, and chanting long sutras in rich family” in Tibet. With the addition of monks’ board expenses, the payment to each monk per day is 40~60 yuan on average (the board expenses of other religious staff is not included). Some families chant sutras 2 times a day and spend a lot of money in inviting the living Buddha to seek divination for the dead. In Yushu (an earthquake disaster), a volunteer from Shanghai told us, he had seen two funeral religious rites. The believers invited 260 monks to chant sutras for a whole day, and the payment to each monk is 80~100 yuan. Even the little monks in five-years old can earn 160 yuan for two religious rites. The divination fee to the living Buddha was more than 100,000 yuan.

5.4 The Marginal Benefit of Religious Consumption Never Declined

Generally speaking, the marginal benefit to a product or services will show a declining trend, however, in the religious believer's mind, the more religious consumptions, the better will be. After the unexpected disaster, some rural will seek the religious consumption with a whole family fortune. In the expenditure of religious consumption, the satisfaction of Tibetan religious believers will not be declined with the increase of religious expenditure. If their income increased, they will take a big part of their income for the expenditure of religious consumption. That's because the general consumer goods have limited satisfaction, but the happiness from religious consumption is endless. There's no spillover effect in religious consumption. In Jiangda, we met a family of 4 people who are on the pilgrimage to the Potala Palace. For the travelling expenses, the family had sold all their cattle and sheep. They make a kowtow a step by step during the whole pilgrimage. The eldest son told us, "my mother is in poor health and it will take us more than half a year for the pilgrimage journey. We were worried their future life after the pilgrimage, but the mother told us, "when we came back home, we can borrow some yaks, and there will be a crowd of yaks after twenty years". A whole family fortune for twenty years was only for a pilgrimage, the consumption value of the religious expenditure is unbelievable to us.

5.5 New Consumer Substitutes have Appeared

Due to the big consumer demand of religious items of Tibetan Buddhism, new consumer substitutes appeared in recent years. For example, the electronic lamps and Indian eatable oil are used as the substitutes of ghee oil lamp. The Indian eatable oil is much cheaper than ghee and also as effective as ghee in the believers' eyes. The electronic prayer wheel also appeared. Some household choose to buy the audio-video products of chanting sutras instead of inviting monks. However, these religious items must be brought by themselves, because they believed the borrowed religious items will lose the power. Thus, new substitutes including electronic oil lamps, audio-video products of chanting sutras, electronic prayer wheel can be promoted in Tibet. These cheaper substitutes can not only release their economic burden, but also guarantee their freedom of religious faith.

According to the above analysis of religious consumption, there's a big market prospects of durable religious items in Tibet, and the self-brand should be established in Tibet.

5.6 The Consumption Level has a Positive Correlation with Income Level

In short, the rural households with high-income level have biggest expenditures on religious consumptions and the low-income households have the least religious consumptions. The religious authority will provide different kinds of religious services according to the household's economic ability. The consumption level (including the daily consumption, seasonal consumption, unexpected consumption and alms to the religious staff) have a positive correlation with the income level of rural households. In other words, the expenditure of religious consumptions will increase with the improvement of income level.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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