# Educational Support to Agrarian and Agri-Food University Programmes in Mongolia



# Cooperation between NUM and AIRAGYN NUTGAAR NGO: Study of rituals and composition related to skin bag airag

Name of the deliverable: WP 2bis1 Report and Memorandum of Cooperation between NUM and AIRAGYN NUTGAAR NGO, regarding Milk Analysis and Transformation

Project Erasmus + APFAA - 585593-EPP-1-2017-1-FR-EPPKA2-CBHE-JP 2017 - 2020























Signing Agreement for cooperation between NGO "Airagnii Nutgaar" and "European Erasmus+ project CBHE-585593-EPP3-2017-1-FR-EPPKA2-CBHE-JP". In photo Director of NGO Taivanjargal and local project coordinator Dr. B. Ochirkhuyag. The project team participated as a consultant for fermentation technology and fermented food safety.



Research team members: Head of Airagni Nutgaar NGO Sosorbaram, Director of NGO Taivanjargal, Local coordinator of EU project "European Erasmus+ project CBHE-585593EPP3-2017-1-FR-EPPKA2-CBHE-JP" Dr. B. Ochirkhuyag, team member Dr. J. Khulan, Dr. D. Tumenjargal.





# "STUDY OF RITUAL AND COMPOSITION RELATED TO SKIN BAG AIRAG" $% \left( 1\right) =\left( 1\right) \left( 1\right)$

#### PROJECT CARD

№	Sum	Number of households	Form of document	Size
1	Altanbulag	40	electronic	37 sq.m.
2	Argalant	7	electronic	23 sq.m
3	Batsumber	4	electronic	313 sq.m
4	Bayan	4	paper	4 pages
5	Bayanjargalan	2	paper	2 pages
6	Bornuur	3	paper	6 pages
7	Buren	14	electronic	32 sq.m.
8	Delgerkhaan	5	electronic	590 sq.m
9	Undurshireet	7	electronic	21 sq.m
10	Ugtaal tsaidam	9	electronic	906 sq. M
11	Erdene	26	paper	30 pages
12	Erdenesant	8	electronic	31 sq.m.
	12	129		





#### Project needs

Mongolians have a long tradition of making fermented milk. However, in recent years, people's lifestyles have changed and some cultures and customs related to airag (a fermented dairy product traditionally made from mare's milk) have been forgotten and fermented airag in non-purpose plastic "blue" containers. Blue containers are not hygienic and can be dangerous to human health. Due to the transition from a nomadic lifestyle to a sedentary lifestyle, horse and airag-related rituals have been forgotten. Therefore, it is important to study the behavior associated with fermented milk, to support its consumption, and to inherit it.

#### Project goals and activities

Project objectives: The aim is to study and promote the rituals and heritage of airag in the soums of Tuv aimag, to study and promote the composition and importance of traditionally fermented airag, to increase the use of lactation, and to improve the use of fermented milk.

Behavioral research related to khukhur airag was conducted in some soums of Tuv aimag between July 1 and October 1, 2019. These include: Altanbulag, Argalant, Batsumber, Bayan, Bayanjargalan, Bornuur, Buren, Delgerkhaan, Undurshireet, Ugtaal Tsaidam, Erdene and Erdenesant soums. A sample questionnaire developed by the National Center for Cultural Heritage was used to collect heritage data. Research on other customs, traditions, and customs was also collected through oral research through dialogue.

#### Traditional rituals related to fermented milk

Mongolians have a long tradition of making nutritious fermented milk with a unique aroma and sour taste.

The traditional tradition of brewing airag with a mare consists of very subtle symbols, such as the birth of a mare (holding and laying a mare) as a symbol of the growth of a herd of horses, the sanctity of airag, and the abundance of sweets. Airag is a sacred delicacy, whether ordinary, reverent, or ceremonial, with the highest level of healing magic. Fermented milk and feasting are not just for fun, but also for living in harmony and optimism. In addition to the techniques used to make good airag, the traditions to be followed, the established order, rituals, the order of each activity, human





harmony, learning and experience, it depends on the specifics and adaptation of the land and grassland where the animals graze.

Mongolians have long known the healing properties of airag. In the past, airag was used to treat almost all kinds of ailments, including coughs and neurological diseases. Drinking fermented milk restores normal sleep, stabilizes intestinal function and blood pressure. It is also said that energy (heat) provides heat to the human body and helps to improve the energy of all the muscles, tendons and blood vessels of the body. Fermented milk restores the body's internal functions, such as the cardiovascular and central nervous systems, regulates blood circulation and digestion, and is very useful for people with tuberculosis, dehydration and various intestinal diseases. Fermentation can cause allergies, and people with allergies should generally avoid sour foods as much as possible.

#### The ritual of holding a mare

The milk libation ceremony is celebrated to greet the warmth of spring and to receive the new-born animals. But at the beginning of summer, the mare's milking ceremony is performed as a sign of mare's milk fermentation. Mongolians have the custom to tether their foals and colts on the Tiger Day, at the inception of summer, and release them from their tethers on the Dog Day of autumn. There is a custom to celebrate the occasion of fermenting mare's milk with a feast, which is held within three days of the tethering. We rejoice with a feast when we release our foals and colts from their tethers in the autumn. Nearby catchers of horses gather together when the day of tethering arrives. The most venerated catcher of horses binds an honorable scarf to his lasso pole, catches the first-born foal, and then hitches it to the first leg of the tethering-line. As soon as the tethering of foals and colts is over, the household invites those participants and hosts for a day of feasting mare's milk fermentation.

After tethering, the household ferments their mare's milk and preserves it. They also prepare dairy products for the feast of mare's milk fermentation. Nearby acquaintances, friends, and relatives gather for the feast. Particularly, those 212 213 who first participated in tethering foals and colts will come to the feast. They bring milk-vodka, shredded cheese curds, rendered cream, cottage cheese, and other dairy products as a contribution.

Before the feast celebration, a long white felt rug is spread out at the head of tethering line. On the felt there is a table on which cooked cakes of





flour are tiered. There is also a plate full of boiled mutton and vessels with mare's fermented milk for offering, milk, milk vodka, among other foods and drinks. At the head of the table, a big wooden pail full of milk is brought. The wooden ladle with its long handle bound with five-coloured scarves is placed over the top of the pail. The head of this ladle has nine square holes. This pail of milk and the ladle, which will be used in this offering, are placed to the west of the other products. All of these items need to be placed before the gathering horses. The horses are gathered and brought to the tethering line at sunrise. At first, the firstborn foal is caught and hitched to the tetheringline. When catchers finish tethering the foals they place their lasso poles in a row at the back of the ger.(yurt). All gathered people can then enter the ger and have tea. Then they go out of the ger, whereupon the milking of mare begins. The first mare is milked by a man. This is a vestige of ancient tradition. In Mongolia men used to milk mares in ancient times. The Secret History of the Mongols says, "Temujin went on in pursuit of a palomino gelding with its companions and when he came to the Bogurchu's household, Bogurchu was milking a mare."

After milking the mares, a milk libation ceremony is performed. In order to do so, nine men who ride grey horses are picked from those participants. The head of the ger (or household) can lead them. If nine horses of whitish color are insufficient, seven or five horses can be used. The nine horsemen mount their horses and come to the door of the ger. The lady of the family then goes out of her ger and meets them holding a silver cup filled with milk. They should each taste the milk. Those nine horsemen then go around the ger in a clockwise direction and come again to the felt spread out at the head of tethering-line. The head of the family slides the lasso pole through the two handles of the pail with milk and then two riders riding gentle horses carry the pail or pails. The head of the family can lead the horsemen. One rider from this group of horsemen takes milk from the pail with a ladle and makes a milk libation in all directions. In ordinary times, women make milk-libation using cow's or ewe's milk, but in special occasions like these, a man should make the milk libation. This is the basic difference.

When the mare's milk-libation starts, participants ride their horses and follow the head of the family and other horsemen. They go around the tethering-line in a clockwise direction three times. The riders go around the tethering-line in a clockwise direction three times and come to the door of the ger. They dismount and lean their lasso poles over the roof of the ger.





They then bring the pail of milk into the ger and place it in the khoimor or most sacred place in the ger. After completing the milk libation, they bind one sacred scarf to the mane of a stallion and another to the neck of the firstborn foal. They carry a plate of tiered cakes and other food from the tethering-line. They say, "How heavy, let's rest" and "Let's move". They pretend that they are unable to carry them to the ger. In such manner they come to the door of the ger and shout, "We have brought dairy products of the milk-libation ceremony." The head of the family comes out of the ger and says "Did you have a good trip?" One of the people answers, "We had lunch at the rich spring and spent a night at a place with rich treasure." They offer the products to the head of the family. The head of the family asks, "What have you brought here?" One of them replies: "This is the wether Which goes at the head Of the thousand sheep, Which is the best Of the ten thousand sheep".

#### Put the mare

When the autumn months come to an end and it gets cold, the dog puts the mare in the day. It is also customary to place a mare. See the scriptures during the day. On the appointed day, gather all the horses, tie the foal and put the horse on the stake, burning incense in the ritual of purification. After milking the mare and unloading the foal's halter, he squeezes the loan, pulls out the stakes, pours milk into the hole and pours barley rice. After milking the mare and untying the foal's halter. This symbolizes the growth of horses and the abundance of fermented milk next year. The mare family prepares and feeds the airag. Celebrate the end of the year with a festive song and joke

#### Foal stamping

Brands traditionally indicated ancestral positions of owners in patrilineal kin-groups, including offices held, aristocratic or serf standing, and religious or lay status. Horse-breeders brand the foals when the milking season ends in September. To perform a branding ritual, a fire is set near the tethering-line. There an iron brand is made red hot. Each foal or colt is then branded one by one, after which the brand is dipped into a bucket of fermented mare's milk. The bucket is brought into the ger to be served at the "Feast for Branding Foals", where guests are invited to celebrate the joyful day. From time to time, a family selects a sacred horse among their herd, which can be identified by a blue scarf tied around the neck. The horse is





generally never ridden, though on rare occasions the head of the household may do so.

#### Fermentation process

Airag is fermented in one of the leather sack (khukhuur) or wooden buckets, but it is better to ferment in a khukhuur. Mongolians have fermented fermented milk in two main ways. 1. Ferment in Khukhuur

The khukhuur, which used to brew airag in the previous year, is soaked in the summer and hung with gulls to make fresh milk. In general, mare's milk fermented for several years does not require special leaven, as it absorbs the nutrients of fermented milk.

#### Ferment with leaven

When brewing airag, make a small skin bag of fermented mare's hot milk as a container for liquids and put it on a horse and ridden a hot day. They also coat raw yoghurt with raw goat's milk, mix it well with sour milk in the sun, add a quarter of its hot milk, and add hot milk every day to make a good fortune. One of the most important processes affecting the oxidation of air is coagulation. Seasonal adjustment is 5000-7000 in summer and 3000-4000 in autumn. Too much autumn ferment will dilute the tea. If the summer ferment is not boiled properly, it will taste too sour. Well-fermented airag is fermented in 7-8 hours.

#### Save leavening agent

Make a well-cleaned felt in autumn airag for 15-20 days, store it in the shade in a dry place without wind, and the next year put it in hot milk, warm it and make leavening agent.





#### **Project results**

In some soums of Tuv aimag, a study was conducted to clarify the intangible cultural heritage related to khukhur airag, rituals, tools, fermentation, acquisition and storage of airag.

Inheritance records were also collected.

The survey covered 129 households in 11 soums. Altanbulag 40, Argalant 7, Batsumber 4, Bayan 4, Bayanjargalan 2, Bornuur 3, Buren 14, Delgerkhaan 5, Undurshireet 7, Ugtaal Tsaidam 9, Erdene 26 and Erdenesant 8 households from Tuv aimag were surveyed and documented. Registration documents were issued for each soum, and detailed records are attached.

According to a survey of herders, the following behaviours have been inherited. This behaviour was clarified orally from the herders.

Herders traditionally keep their mares on tiger days in the spring or early summer, and in the fall on dog days, and have traditionally branded their foals in the fall. There is a common method of fermenting fermented milk by adding 20 litres of milk to 1 litre of goat fat.

When making a cow, choose a light-skinned cow with no mechanical damage and no holes in the bridge. Knead the bran and salt, apply it on the inside, fold it together and fold it. Return to the fire for 7-10 days. When the hair grows back, pull it out. Clean the hair and make a braid. Then add the excess in the afternoon. Sew with vinegar and make frequent holes. After sewing, it is soaked in whey drought. If you wipe the outside with cheese whey, you will get a nice yellow milk. Pale cowhide turns into light white milk. It costs 250 litres if it is made of yellow cowhide and 150 litres if it is made of cowhide.

In fermenting airag, the householder and his children pull and pull the foal, the housewife milks the mare, and the fermented milk is fermented. Fermentation pistons are made by drilling holes, which are believed to activate lactic acid bacteria. The mare is milked 2 hours apart and the herd is divided into more than 3,000 groups. The hay is folded and dried in the fall. In the summer, when a mare is caught, her breasts are soaked in whey, dried, and the rest is fermented to make milk. It does not contain foal pendants or belts. Airag is also brewed when milking in a small leather bag and riding a horse. In repeated interviews, herders confirmed that fermented milk from late autumn and early winter could not be used for fermentation or fermented.





According to the data collected during the survey and the interviews of the herders interviewed, a small number of households have inherited the rituals associated with fermented milk.

In recent years, research has shown that the value of khukhur and khukhur airag is increasing as a result of the annual "Airag Festival".

#### Conclusion

During the survey, most households fermented their airag in blue containers, and a small number of households fermented their airag in skin bag (khukhuur). Herders reported that the number of mare-keeping households had decreased in recent years due to global warming. Milking and fermenting a mare is also a labour-intensive activity. Due to lack of manpower or lack of people to milk the mare, they are unable to hold the mare. The results of the study show that there is a lack of inherited behavioural knowledge related to fermented milk.

There is an urgent need to take organized measures to support the preservation and inheritance of the intangible cultural heritage of Mongolia.

#### Used book

- 1. Aryaasuren. Ch, Nyambuu.Kh, Dictionary of Mongolian customs, UB.1992
- 2. Baldorj.R, Namsrai.Ts, Mongol airag, UB, 1980
- 3. Batbold.A, Minor Encyclopedia of Mongolian Ethnicity, Ulaanbaatar, 1993







Herder of Bayanjargalan soum R.Bayanduuren



Davaasuren, a herder from Bayan soum













# Тов. Борнуур.







БИЧИГТ БАГИЙН ИРГЭН ӨВЛӨН УЛАМЖЛАГЧ Н.ГАНБОЛД













#### НИНААХҮҮГИЙН АЙРАГ ХАДГАЛДАГ САВ





ЛЕЙХАНЫ АЙРАГ ЭСГЭГЧ ГУШАЛА



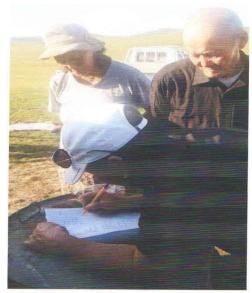








ХӨХҮҮР УРЛААЧ БАДАРЧИЙН МАРТИНОВ





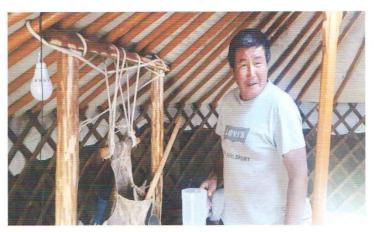








Хөхүүр урлаач Төрийн Батбаатар











# TRANSLATION MEMORANDUM OF COOPERATION

March 4th, 2019 Ulaanbaatar

On the one hand, the NGO "Airagny nutgaar", on the other hand, Associate Professor of Biology, National University of Mongolia B. Ochirkhuyag and others agreed to cooperate on the following issues and signed this memorandum on March 4, 2019.

#### ONE. COMMON GROUND

- 1.1 It aims to revitalize the intangible cultural heritage of Mongolian skin bag airag, to pass it on to the younger generation, to identify the heirs, to promote it to the public, to increase the use of skin bag airag, to taking out and preserve airag fermentation leaven.
  - 1.2 The cooperation will be open to the public and will focus on the preservation, protection and promotion of Mongolian cultural heritage.

#### TWO. MAIN DIRECTIONS AND ACTIVITIES OF COOPERATION

- 2.1 Identify inheritors of skin-bag airag fermentation.
- 2.2 2.2 To study the methods of extracting and storing of skin-bag airag's fermentation leaven,
- 2.3 Separation and storage of biochemical composition and source material of milk ferment
- 2.4 2.4 Promote the importance of fermented milk
- 2.5 2.5 Advocate on the dangers of plastic containers and promote for reduce their use
- 2.6 2.6 To conduct trainings and advertisements to promote the importance of skin-bag airag and increase its consumption

# THREE. OBLIGATIONS AND RESPONSIBILITIES OF THE PARTIES WITHIN THE FRAMEWORK OF THE MEMORANDUM

- 3.1 The parties will work together on the terms and conditions agreed upon in the memorandum, which will be updated and amended by mutual agreement.
- 3.2 It is prohibited for any party to demand to perform duties outside the main functions specified in the law and not specified in this Memorandum of Understanding, or to exercise illegal privileges.
- 3.3 The parties shall respect each other and cooperate in a business-like manner.
- 3.4 The memorandum has no legal consequences like a contract and is based only on mutual trust between the parties.
- 3.5 Any disputes shall be resolved by consensus of the parties.

#### FOUR. COOPERATION PERIOD

- 4.1 This letter was signed for a period of 3 years.
- 4.2 At least once a year, the parties shall jointly evaluate the implementation of the memorandum and resolve the issue of extending it by providing an evaluation.
- 4.3 The implementation of the memorandum will be evaluated in the 4th quarter of each year.

Representing The Parties

Airagny nutgaar "Айрагны нутгаар" NGO CEO B.Taivanjargal NUM department of Biology B.Ochirkhuyag /Ph.D., Prof/





#### Translation

#### Authority for State Registration

Date:	State certificate
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number:9071057030

Register number: 8170193

Airagny nutgaar social

service NGO

Name of legal entity and type of liability

Founding documents: Rule

Decision 001 2015.03.05 8211 organize a trip for study and advertisement of airag rituals, importance and folk tradition usage /Main engagement activity direction/

Unlimited 5 0.00

Term number of member amount of own

capital, thousand MNT

<u>Ulaanbaatar, Chingeltei district 7-region, huvisgalchid a-5, 99, Phone number:</u> 99719700, 99143334

official address of the legal entity

General Authority for State Registration



