

**Czech Development agency**

**„Temporary Expert Assignment“**

**CATTLE identification system in mongolia**

Prepared by: Eng. Zuzana Biniova (Natural, s. r. o.), Eng. Tomáš Vozáb (Medicom, a.s.)

- 2016 -

**Temporary expert assignment (within the framework of transfer of Czech transitional expertise)**

**Title in Czech Language:**

Systém značkování skotu v Mongolsku

**Title in English Language:**

Cattle Identification System in Mongolia

**Applicant:**

***a) Natural, spol. s r. o.,*** Rubešova 10/83, 120 00 Prague 2, Czech Republic

VAT: CZ41693639

Contact person: Biniová Zuzana

Phone: +420 730 510 141

E-mail: zuzana@naturalgen.cz

***b) Medicom a.s*.,** Dobropolská 12, 102 00 Prague 10;

VAT: CZ00538078

Contact person: Tomáš Vozáb

Phone: +420 271 001 527

E-mail: Tomas.Vozab@medicom.cz

**Partner Institutions:**

**a) National Centre for Animal Genebank** (NCAG) under Ministry of Food and Agriculture, government Building 9 Peace Avenue 16A, Ulanbaatar 13381 Mongolia

**b) Department of Veterinary and Animal Breeding** (DVAB) under Ministry of Food and Agriculture, government implementing agency

Government building 11, Sambuu street 11, Chingeltei district, Ulanbaatar 13381, Mongolia

**Estimated Area of Expertise:**

***a) Natural***

Assessment of agriculture area, knowledge of cattle identification and evidence systems including EU law, and their impact on cattle production and genetic progress.

Ms Biniova worked as an agriculture advisor in PRT Logar (Afghanistan) where she was responsible for assessment in the field of agriculture. Currently she works as project manager and manager of semen production laboratory at A.I. centre Hradištko. She is also an advisor accredited by Ministry of Agriculture of the Czech Republic, therefore she has a proven orientation in agriculture law, cattle identification and evidence system principles and their benefits.

***b)******Medicom***

Laser marking and animal identification system specialists. The first specialist Mr. Valach has more than 25 years of experience on the field of animal identification systems, databases and laser marking of animal ear tags.The second specialist Mr. Vozáb works at MediCom Company as laser marking specialist including programing in MediCom laser control software WMark.

**Expected Start and End Dates:**

***Mrs. Biniova, Natural***

Oct 12th – Nov 3rd – overall duration for preparation to the visit in Mongolia

Oct 18th – Oct 26h – visit in Mongolia

(Oct 17th + Oct 27th -28th – for round trips, with overnight stay in Istanbul – due availability and price of flights in stated dates)

***Mr. Vozab, Mr. Valach, Medicom***

October 24th – October 29th, 2016 – visit in Mongolia

**Total Amount of Days in the Field:**

***Mrs. Biniova, Natural*:** 9 days in filed in 2016, 64 hours preparation in Czech Republic

***Mr. Vozab, Mr. Valach, Medicom*:** 2 people - 6 days in Mongolia in 2016 (in total 12 days); 30 hours preparation in Czech Republic

**Expected Partner’s Institution Type of Cooperation:**

***a) For Natural***

aa) Provision of relevant documents (cattle evidence and identification law valid in Mongolia, Mongolian livestock national program, FAO strategies/reports if there are any) – before Oct 12th;

ab) provision of car and accompanist for meetings (trainings) at cattle herds (gas paid by Natural) during the field work in Mongolia;

ac) cooperation and explanation of relevant issues during the field work in Mongolia;

ad) presence of Genebank experts at the final meeting during the field work in Mongolia.

***b) For Medicom***

ba) Presentation of Unicollector software developed by Mongolian company JTIS LLC.

For ours better understanding of the Unicollector software the presence of someone of the creators (IT administrators) is necessary.

bb) Access to the laser marking machine LD50C installed in Ulaanbaatar.

Ensure animal ear tags for marking.

Ensure operating conditions for the laser:

- Power supply socket for the laser 100–240 V, 50/60 Hz

- Room temperature for the laser 16 ÷ 35 °C non-condensing humidity

bc) Ensure presence of persons responsible for laser marking operations like marking of animal ear tags, new program creation and modification, laser maintenance etc. Presence is required especially at October 26th and October 27th 2016 when practical IT training of laser marking control software will take place.

bd) Ensure presence of persons responsible for both separate systems (Unicollector and laser control software WMark) and persons who are interested in systems cooperation. Presence is required especially at October 28th when will be a consultation about possibilities of both software and necessary modifications which can enable their cooperation.

C**ontext:**

Cattle identification and evidence system is a basic tool for animal breeding (cattle performance increase) and veterinary control (e.g. health declaration when cattle products are being exported), however the use of the system is very limited in Mongolia. Export of cattle, meat and dairy products is generally impossible without such a (transparent) system. Currently, this situation limits the export opportunities of Mongolia, even though there is a high demand for beef, not only in neighboring countries (Russia, China), but also across Asia. Mongolia, with its beef surpluses, could be an important player on the field of beef production in the region.

Demand for cattle identification and evidence system development is stated in the Mongolian Livestock National Program. There are currently being run two independent systems of cattle identification and evidence in Mongolia; the first was established and supported by the Czech Development Agency where NCAG is responsible for its administration, and the second was funded by the Mongolian government and is administrated by the DVAB. These two systems are probably run under different software, ear tags are marked with different data and we can expect dissimilar data in databases. Additionally they are not connected at any level. This status limits the reliability of Mongolian cattle identification system and the dissipation of governmental budget supporting two systems focusing on the same task.

Moreover, most of the Mongolian farmers are not aware of the benefits that are brought by cattle identification and evidence use. We can also anticipate a very limited familiarity of responsible persons at NCAG and DVAB with EU law. Therefore trainings of NCAG and DVAB employees in these topics are recommended to strengthen their effort and efficiency in cattle identification extend.

Finally, there works FAO focusing on cattle breeding and beef production in Mongolia. It plays an important role in agriculture sector development for its human resources and budget availability. Therefore activities of FAO in cattle identification and evidence shall be considered too if there are any.

**Expected Outcomes and Results by the Applicant:**

***a) Natural:***

An assessment of current situation, law, and databases will provide footing to cattle identification and evidence draft formulation, which shall include short current situation description, recommendation on these two systems connection and suggestion of roles of NCAG and DVAB in the system. It shall lead to the unification of the system, higher efficiency (including its financial component) and reliability of the system.

Trained employees of NCAG and DVAB shall be able to promote benefits of cattle identification and evidence system which shall have an impact on it’s extend in Mongolia.

Knowledge of EU law would help to organize the system in the way that allows Mongolian companies to export beef and beef products to Europe.

***b) Medicom:***

Familiarization with Unicollector software developed by Mongolian company JTIS LLC.
For ours better understanding of the Unicollector software the presence of someone of the creators (IT administrators) is necessary.

Examination of laser marking machine LD50C and eventual diagnostics, service and adjustments.

Practical IT training with control software of the laser marking machine LD50C.

Consultation about possibilities of both softwares and necessary modifications which can enable their cooperation.

**Expected time schedule**:

***a) Natural:***

Oct 12th – 13th – application for visas and other issues linked to the business trip (hotel reservation, insurance, flight tickets, and etc.), preparation of presentation - about Czech law concerning cattle identification and evidence and benefits of cattle identification and evidence for farmers , available materials search and read (Mongolian law, Mongolian Livestock Program, FAO reports and etc.

Oct 17th – departure from Prague

Oct 18th – arrival, meeting with the Czech Embassy representative

Oct 19th – meeting with NCAG, meeting with DVAB – introduction, roles and needs identification

Oct 20th - NCAG database examination

Oct 21th – DVAB database examination

Weekend:

Oct 22nd training for farmers “Cattle identification and evidence benefits” or visit of herds where cattle identification and performance testing are being run, needs identification

Oct 23rd – Report preparation: outputs from meetings and examination processing, formulation of recommendations

Oct 24th – activities of FAO examination, meeting with United Private Veterinary Clinics of Mongolia representatives (needs identification),

 - revision and addition of information to Report

Oct 25th – “Round table” with relevant parties – discussion about system, their roles, recommendations. Summary formulation – base for Medicom

Oct 26th – Meeting with Medicom, Summary hand-over

Oct 27th – Departure from Ulanbaatar

Nov 1st - 3rd – Final report formulation, financial settlement, round table at CzDA

***b) Medicom:***

Oct 24th **-** arrival to Ulaanbaatar in the morning,

 - familiarization with Unicollector software developed by Mongolian company JTIS LLC. For ours better understanding of the Unicollector software the presence of someone of the creators (IT administrators) is necessary.

Oct 25th - Examination of laser marking machine

LD50C and eventual diagnostics, service and adjustments.

Oct 26th – Meeting with Natural, Summary hand-over, 27th - practical IT training on control software of the laser marking machine LD50C

Oct 28th- consultation about possibilities of both softwares and necessary modifications which can enable their cooperation.

Oct 29th - departure to Prague

**Team Members:**

***a) Natural:***

Eng. Zuzana Biniová – expert on assessment in agriculture, cattle specialist, agriculture advisor

***b) Medicom***

Mr. Pavel Valach – expert on animal identification systems, databases and laser marking systems

Mr. Tomáš Vozáb – expert on laser marking and programing in MediCom laser control software WMark

**Expected Amount of Work in Total:**

21

**Amount of Work per Expert in Total:**

Mrs. Biniova – 9 days

Mr. Pavel Valach – 6 days

Mr. Tomáš Vozáb – 6 days

**Amount of Work per Team in Total:**

**2016:**

**Natural:** 9 days in Mongolia, 64hours preparation in Czech Republic

**Medicom:** 12 days in Mongolia; 30 hours preparation in Czech Republic

**Total:** 25 days in Mongolia; 110 hours preparation in Czech Republic

**Funding:**

The funding is divided between Natural and Medicom.

As stated in the Attachment III to the both contracts.

- Explanation of other subcontracting costs at 5.7 in Attachment III for Medicom contract.

*5.7.1 Includes service parts for usual one year laser machine maintenance*

Parts are necessary for correct laser function after longer time period than one year. Parts will be invoiced according to the contract to the ČRA agency after return from Mongolia.

*5.7.2 Includes service parts for exhausting unit - filters etc.*

Parts are necessary for correct exhauster unit function. After longer time period than one year all the filters should be replaced. Parts will be invoiced to the ČRA agency after return from Mongolia.

*5.7.3 Includes laser module for laser type LD50C - this module will be replaced and its price shall be invoiced only if the old module is nonfunctional.*

Part is necessary for laser function. Due to extreme conditions especially low temperature in Mongolia there is a high probability of laser module damage. Part will be invoiced to the ČRA agency after return from Mongolia only if must be replaced.

**Complementarity:**

Development projects in Mongolia are implemented in following sectors: water supply and sanitation, energy, business and other services, agriculture and education. Geographically, development cooperation is focused not only in the central area near the capital city of Ulaanbaatar but also in remote areas across Mongolia.

In the sector of agriculture which is one of the main economic sectors in the country, CzDA implements project focused on increasing the efficiency of the artificial insemination of cattle in the central region. Temporary expert assignment focused on A.I. services quality development in Mongolia was implemented in 2016. Project follows up previous activities of CzDA in the region such as creating system for identification and registration of animals project. In the educational sector CzDA cooperates with some of the Ulaanbaatar universities and work together on a new program focused on increasing quality of tertiary education by visits of Czech teachers in the developing countries. Czech Geological Survey implements a project designed as budgetary measure which aims to map a part of mountainous area in Khovd Province on the west of the country.