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## Providing cow-assisted therapy in the context of Polish realities

**Abstract.** Cow-assisted therapy is one of the forms of bovine-assisted therapy, which is used to improve well-being and as a treatment for numerous diseases and disorders. Despite its growing popularity around the world, it remains relatively unknown in Poland. Cow-assisted therapy can be a good basis for diversifying the activities of cattle breeders. The purpose of the study is to identify the determinants of the provision of a cow-based health support service in Poland. The method used is a case study. The object under study is located in the warmińsko-mazurskie voivodeship and is one of the few places in Poland offering therapy with cows. It is also a facility that offers the purchase of animals trained for bovine-assisted therapy. There are barriers limiting the development of therapy with cows in Poland. Among the most important of these are cultural, climatic, financial, personnel and time barriers.

**Keywords:** cow-assisted therapy, cow cuddling, cow hugging, animal therapy, bovine-assisted therapy, case study

### Introduction

The Polish countryside, formerly identified only with agricultural production, has undergone a significant transformation. Today, rural areas perform a variety of functions – not only economic, but also social, ecological, cultural and tourist (Sikorska-Wolak and Krzyżanowska, 2010, p. 46; Sieczko, 2012, p. 353). They also increasingly fulfil functions related to health and disease prevention (Roman, 2023, p. 201). One type of health service that is provided in rural areas is animal therapy. This is a process of treatment and health support with an animal as a central element.

Animal therapy, also known as zootherapy, can use various species of animals, including cats, dogs, rabbits, horses, donkeys or cows (Dimitrijević, 2009, p. 237; Borioni et al., 2012; Sharma, 2021). There are many studies with results confirming improved human health as a result of interaction with animals (Pan et al., 2012, p. 30). In recent years, there has been an increase in the popularity of cow-assisted therapy, which is particularly appreciated in the United States and Switzerland. Domestic cattle are the most numerous species of large livestock, with a global population of more than

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1.4 billion after 10,500 years of domestication. Despite the various possible uses for domestic cattle, in modern times they are raised mainly for food production (Guliński, 2017, p. 1).

Poland's cattle population in 2023 was nearly 6.44 million, placing it fourth in the European Union – just behind France, Germany and Ireland (Eurostat, 2023). The achieved position underscores the large traditions of domestic cattle breeding, which directly translate into the resources possessed by the country's dairy farmers and producers, i.e. knowledge, experience and infrastructure. These resources could be a good basis for diversifying operations and starting to provide cow-assisted therapy on a large scale in Poland, where it is not yet a well-known form of animal therapy. Expanding the business to include health services by cattle farmers is an entrepreneurial activity, which refers, among other things, to managing a farm that allows for the optimal use of its labour resources (Parzonko and Sieczko, 2021, p. 79).

The use of native breeds of cattle for health purposes could support efforts to preserve biodiversity, in the context of which native breeds are not only a genetic reserve, but are also considered historical and cultural heritage (Sobocińska and Sobociński, 2015, p. 75). Increasing market demands and human needs for increased productivity, as well as the evolution of production systems and breeding conditions, have led to the phenomenon of genetic erosion in cattle breeding. As a result of this process, low-producing, or primitive, breeds are giving way to high-producing, or noble, breeds (Litwińczuk et al., 2006, p. 457). Thus, the inclusion of cow-based therapy in the services offered by cattle breeders of conservation breeds, which are not characterized by outstanding milk or slaughter performance, can provide an additional source of income and, as a result, influence the increase of the population of indigenous breeds and maintain the size of cattle herds covered by the National Programme for the Conservation of Animal Genetic Resources.

With the growing interest in cow-based therapy, new prospects are emerging for their use in various areas, including the tourism industry. The implementation of tourism with a cow motif can help raise the socio-economic level in a region (Szczucka, 2023). An example is the Cow Parade in Switzerland. The event brought more than one million additional visitors to the locality where it is held (Decker, 2002, p. 119). It is worth noting that access to therapy with cows in a specific area benefits not only the tourists, but also the locals, who can enjoy it on a regular basis.

The first section of this article characterises cow-based therapy and describes some of its benefits, as well as defining the characteristics that the animals used in therapeutic activities should have. This is followed by the methods and results of the research, which are described in six sections. These relate, in turn, to the specifications of the facility studied in the case study, the characteristics of the cows used in therapy, an outline of the segment of recipients of health services, a description of the therapy activities provided, a presentation of how the facility is promoted and future plans for cooperation, and identification of barriers to the development of the therapy provided. The study ends with conclusions and a summary. The main aim of the study was to identify the determinants of cow-based therapy provision in Poland.

### Cow-assisted therapy

Cow-assisted therapy, also known as cow cuddling or cow hugging therapy, is a process of health support in which a representative of domestic cattle is a central and indispensable element. This form of treatment is one type of bovine-assisted therapy, the etymology of which is derived from the words – *θεραπεία* and *bovidae*. The Greek *θεραπεία* means therapy, cure, treatment (Słownik minimum grecko-polski..., 2000, p. 76), while the Latin term *bovidae*, was proposed by John Edward Gray in the first half of the 19th century (Wilson and Reeder, 2005, p. 673). It first appeared in the English journal *The London Medical Repository*, where the family *bovidae* was formally described as one of the orders of ruminants (Gray, 1821, p. 308). This characterization was one of the earliest and most comprehensive taxonomic classifications of ruminants (Silvia, 2019), where, in addition to *bovidae*, other then-recognized families were described, namely *moschidae*, *cervidae*, *giraffidae*, *antilopidae* and *capridae* (Gray, 1821, p. 307-308).

One approach in current taxonomy is to include within the *bovidae* family subfamilies such as *bovinae* or *caprinae* (Yang et al., 2013, p. 140). In broad terms, bovine-assisted therapy refers to the use of domestic animals from the entire *bovidae* family for therapeutic purposes. Thus, not only domestic cattle, but also goats and sheep from the *caprinae* subfamily can be used for bovine-assisted therapy.

Although the therapeutic properties of domestic cattle were known and valued as far back as antiquity, as indicated by texts of the time from what is now India (Kedia et al., 2022, p. 17), the use of cow-assisted therapy in its modern form began in the first decade of the 21st century in the Netherlands. Therapy with cows in that country is customarily referred to as *koe knuffelen*, which freely translated means “cow hugging” (McGiffin, 2022, p. 93). During the therapy sessions, in addition to cuddling with the animals, participants can observe, groom, brush, stroke, lie with them in the meadow, and talk to them. Other possible activities include, for example, painting or drawing a selected cow (Szcucka, 2023, p. 701), which constitutes a unique incorporation of art therapy elements into animal-assisted therapy. With types of animal therapy, such as hippotherapy, it is possible to use a whole range of exercises and games aimed at increasing the effectiveness of the therapeutic process (Szcucka and Sokolowski, 2023). Cow-based therapy also offers such a possibility. For instance, children may be given the task of counting the patches on an animal’s body, outlining them with their fingers (Szcucka, 2023, p. 701), or clipping a cow’s mane with hairpins, which improves their pincer-grasp grip.

Interacting with a cow – an animal with a lower heart rate and higher body temperature than humans – can promote calming and reduce stress in humans (Sharma, 2021, p. 86). With these effects, therapy with cows can be used to treat a variety of disorders and diseases, including depression and anxiety disorders. Properly conducted, it can also support the improvement process for people on the autism spectrum or with sensory integration disorders (Szcucka, 2023, p. 700).

Cows used for therapeutic purposes should have the right characteristics. First of all, they must not be skittish, unpredictable or aggressive. Instead, they should be friendly, calm and enjoy the company of humans. For safety reasons, bulls are not used in therapy.

In addition to character traits and gender, proper training is of considerable importance. To be effective, work with future cow-therapists should begin in the first months of their life. Training includes getting used to touching all over the body, desensitizing them to noises, familiarizing them with various unusual situations or learning about auxiliary equipment, if it is to be used during classes (Szczucka, 2023, p. 702).

### **Research methods**

A case study method was used to identify the determinants of cow-assisted therapy provision. This is a well-known and successfully applied method, which in Western Europe and the United States has been used for many years in research work in the social sciences. Even a preliminary review of scientific periodicals in the field of economics and management allows one to notice a large number of studies in which the case study is the main research method (Zaborek, 2007, p. 266). When applying it, triangulation of research methods and techniques is recommended. Thus, in its scope, for example, observation (participatory and non-participatory), interviews (with different levels of standardization of questions) or document analysis are used (Pizło, 2009, p. 248-249).

The facility selected for analysis is one of the few centres in Poland where therapy using cows is offered. It is also one of the first of its kind in the country. Data collection took place in March and April 2024. The study included:

- a structured interview with the owner of the facility (March 21),
- three in-depth interviews with the owners of the facility (March 22, 26 and April 14),
- participatory observation (March 26),
- an in-depth interview with a service recipient (March 28),
- analysis of service providers' social media site (data as of April 12).

### **Research Findings**

#### *Specifics of the business*

The establishment selected for analysis in the case study is an organic farm located in the village of Sterławki Wielkie, in the municipality of Ryn, in the Giżycko county, in the warmińsko-mazurskie voivodeship. The owners of the object under study are a married couple – Mrs. Agnieszka and Mr. Adam Scibut. The total area of the farm is 22 hectares. The core activity of the unit is the preservation of permanent grassland and, since 2021, the rearing and breeding of white-backed cattle with a meat production direction. The provision of cow-assisted therapy started here in July 2022 as an additional activity. Currently, it is one of the few in Poland and the only facility in the region providing this type of animal therapy. It is also the place where heifers are trained for cow therapy. Those predisposed to become assistance animals are sold to agritourism farms and centres providing animal therapy services.

The decisive impetus for expanding the business into a therapeutic profile was that the owners noticed the positive feelings resulting from interaction with the reared cattle. Observing to what extent interacting with these animals brings peace, relieves tension and improves mood, Mr. and Mrs. Scibut decided to use their unique

properties for therapeutic purposes. Not without significance were also the opinions and persuasions of cooperating zootechnicians, who noticed that the owners' cows, due to their calm disposition and receptiveness to humans, have a high predisposition to become assistance animals in animal therapy.

Mrs. Agnieszka Scibut has extensive experience and qualifications in raising and caring for cows, as they have accompanied her since her early years. Since the service provider's parents had a farm and were involved in milk production, among other things, Ms. Agnieszka helped with daily chores around the cows as a teenager. As a result, she gained valuable competence and knowledge about the needs and behaviour of domestic cattle. In addition, the owner is also highly skilled in caring for horses and hens. Therefore, it is possible that in the future the facility's health offerings will be expanded to include hippotherapy and avitherapy.

Service providers feed the cattle with roughage, meal and beet pulp. They obtain hay and haylage from their own meadows, which helps reduce the costs of keeping animals. Grain for meal is purchased from a local farmer, and beet pulp from a feed store in Giżycko.

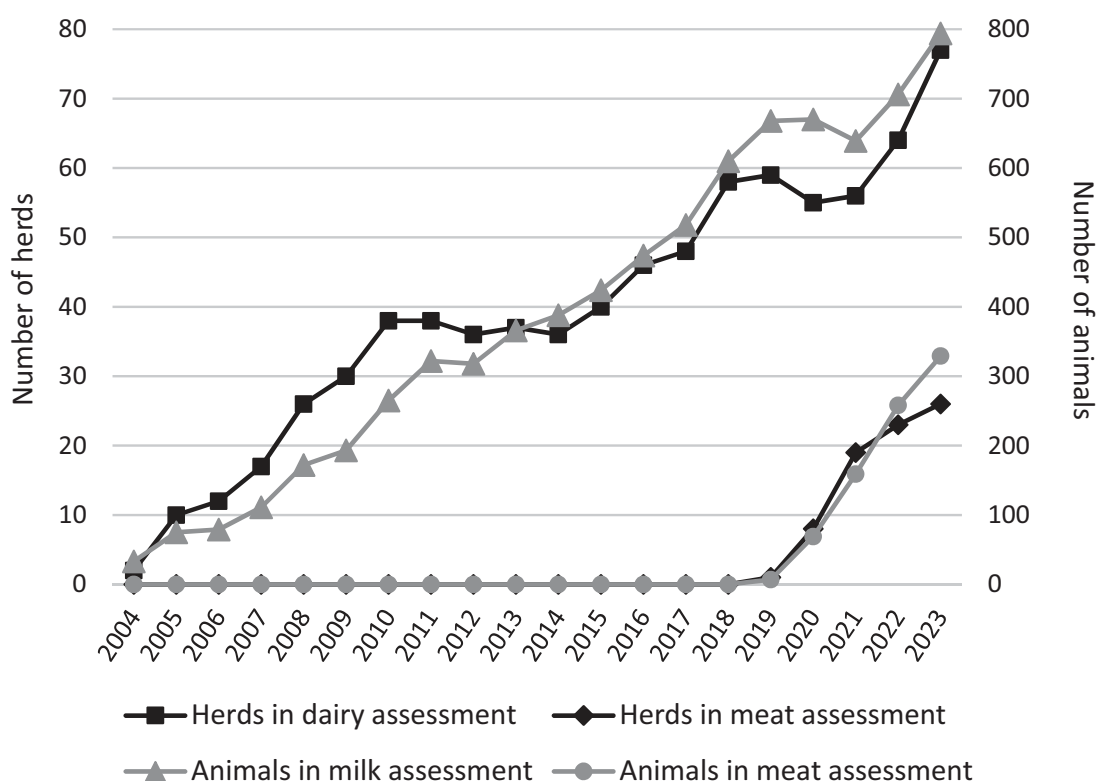
### *The animals used in therapy*

The service providers have a total of ten animals that are used for breeding. Some of them are sucklers rearing their calves. Eight individuals are used for therapeutic purposes. These include four cows and four calves. The centre does not use bulls or steers for therapeutic purposes, which accounts for the higher level of safety during classes. The animals are kept in a free-range system. In winter they stand in a paddock with access to a shed, and during the grazing season the entire herd, with the exception of bulls older than eight months, is released into a 6-hectare meadow.

Free-range breeding is beneficial to the welfare of the animals, as they can reveal their natural behaviour. In addition, thanks to this approach, they are provided with outdoor exercise and do not have to absorb harmful gases, high concentrations of which are usually present in the alcove system. This directly translates positively into their health, especially in the context of the respiratory system. In addition, the lower density of individuals in a certain space improves their comfort and reduces the transmission of pathogens (Szulc, 2011, p. 142).

In the analysed unit, white-backed cattle are bred and used for cow therapy. As an indigenous breed that has existed in Poland for centuries, it is distinguished by a high degree of adaptation to difficult environmental conditions and high resistance, high health, longevity, and good fertility (Krupiński, 2008, p. V). In the interwar period, the population of this breed accounted for less than 10% of all cattle in Poland (Sobocińska and Sobociński, 2015, p. 73). However, due to the devastation caused by World War II and increased imports of breeding material in the early 1950s, its numbers drastically decreased. As a result, in the 1960s, Professor Pająk of the Warsaw University of Life Sciences declared the breed extinct (Majewska, 2019, p. 92). Currently, it is one of the four cattle breeds under the protection of genetic resources, having been included in the program in 2003 (Krupiński, 2008, p. V).

Some of the cows in the study facility were included in the Program for the Conservation of Genetic Resources of the White-Backed Cattle Breed as a herd in meat evaluation. In 2023, it was one of 26 such herds in Poland. The first herd of the white-backed cattle breed in the country to be protected in meat evaluation was approved in 2019, and compared to the number of herds and animals in dairy evaluation, their number is relatively small (Fig. 1). This is due to the program’s limits for cows of this breed with meat and dairy type in terms of meat production traits. As of July 2021, the limit is 35% of all eligible cows for the conservation program compared to the previous year (Program ochrony zasobów..., 2023, p. 9).



**Figure 1.** The number of white-backed cattle under the genetic resources conservation program

Source: own preparation based on data from the National Research Institute of Animal Production in Poland (Instytut Zootechniki..., 2024).

The animals used for therapy in the analysed unit have been in the possession of their current caretakers since they were still calves. In their first months of life, they were already familiarized with walking on a halter and were gradually accustomed to being touched all over the body, cleaned and given legs. Such handling contributed to their calm disposition, the formation of trust in humans and the development of desirable traits indispensable for their role as therapy animals.

One adult animal generates costs of more than PLN 900 per year for the facility, of which the approximate cost of feed is PLN 600, supplements and mineral licks –

PLN 100, veterinarian services mainly related to insemination and deworming – PLN 210. Thanks to Mrs. Scibut's ability to correct hooves, expenses related to animal care are significantly reduced.

#### *Recipients of health services*

Segmentation of the tourist market, which is based on the characteristics of particular groups of tourists, is becoming one of the basic elements of rural tourism (Roman and Roman, 2023, p. 55). So far, the recipients of therapeutic services at the studied facility were families with children. They were not only tourists, but also residents. In some countries, therapy with cows is the main destination for tourists, who spend many hours traveling to the place providing it (McGiffin, 2022, p. 93). In the unit analysed so far, benefiting from cow-assisted therapy has not been the main motive for tourists' travel.

The stay of vacationers in a particular destination can generate additional income for locals who are not directly involved in the tourism industry (Balińska and Zawadka, 2013, p. 137). Although Mr. and Mrs. Scibut do not operate accommodation services, tourists also enjoy the animal therapy they offer. This peculiar symbiosis between tourism and health services can benefit both the local community and the development of tourism in the region.

Sometimes visitors to the centre are afraid of contact with animals. Fear is felt by both adults and children. However, both age groups usually quickly overcome their fear. It should be mentioned that some adults feel a special awe towards cows. Service providers have noted that after the classes, visitors are in a better mood and are often fascinated by the cows.

#### *Characteristics of therapeutic classes*

At the analysed facility, therapeutic activities are conducted exclusively by the owners. They take place during the pasture season in a meadow, which enhances the therapeutic effect due to the prevailing conditions, such as silence, the environment of nature and birdsong. Since the therapy takes place outdoors, it is not conducted on rainy or cold days. Visits to the centre are also not possible during the 3-4 week perinatal period, so as not to disturb the animals during this time. So far, activities such as stroking cows, cuddling with them and sitting next to them in the meadow have been offered for guests. In the future, service providers plan to expand the range of activity elements to include cleaning the animals, learning how to lead them on a halter, counting dots and drawing their favourite cows. There are also plans to introduce support equipment such as sensory balls and other props.

The price for one hour of individual classes is PLN 50 per person. For group classes, which can be attended by up to four people, the price is PLN 40 per person. In the studied unit, it is also possible to customize therapy sessions for different age groups and clients' needs.

Each time before therapy begins, guests at the facility are instructed on what they can and cannot do near the animals. Prohibited activities include shouting,

waving hands rapidly, or attempting to make contact with a cow that is unwilling to do so at a particular time. In order to take care of the animals' welfare, service providers do not exceed the established daily timeframe of 4–5 hours of contact between cows and visitors.

During participant observation, the author had the opportunity to watch a cow-assisted therapy session conducted for one person. He was a middle-aged man who had been experiencing increasing high levels of stress for several weeks. Under the supervision of the centre's owner, he spent two hours among the cows and calves, during which he stroked and cuddled with them. According to the person undergoing the therapy, it had a calming effect on him and significantly reduced the level of stress he felt. Reports of such feelings confirm the therapeutic properties of classes with cows.

### *Cooperation and promotion*

Currently, the owners of the surveyed centre do not cooperate with tourist facilities offering accommodation, but they intend to start such collaboration in the future. They plan to enter into partnerships with agritourism farms and people renting rooms, apartments, houses and cottages. The cooperative could consist of recommending health and tourism services to each other. Although service providers have not yet entered into partnerships with other centres offering animal therapy, this also appears to be a promising course of action.

Service providers are not members of any tourism association or cluster but would be willing to join such a grouping if it would help promote their offerings. Tourism clusters in rural areas play an important role not only in terms of activating the local community, but also the entire region or country. Clusters increase the competitiveness of a specific area on the tourism market, and on the basis of the cooperation established thanks to them, a locality has the potential to turn into a tourist area (Roman, 2017, p. 45). Therefore, the participation of facility owners in the cluster or their efforts to establish one could contribute to the socio-economic development of the region.

At the moment, the owners promote the cow-assisted therapy they provide exclusively through social media – via a Facebook page called „Krowo terapia / / przyjacielskie krowy” (Cow-Based Therapy/Friendly Cows). The fan page has 38 likes, 66 followers and two positive reviews. The number of posts is 15 – they include shares of foreign videos about therapy with cows, as well as photos and videos from the facility showing the cows and the classes being held. Alternating between posting one's own material and sharing videos from other centres enhances the form of the message and makes the page interesting to read. The number of likes under each post varies between one and eleven and totals 67, giving an approximate average of 4.5 reactions per post. This result indicates a high level of engagement with the page's audience, as it amounts to almost 12% of the number of likes and more than 6.5% of the number of followers.



### *The barriers to the development of therapeutic services*

One of the barriers to the development of cow-assisted therapy perceived by facility owners is the still low popularity of this type of animal therapy in Poland and, consequently, the low demand for it. Service providers also note a lack of awareness of the benefits of therapeutic classes using cows. They have sometimes observed people's bewilderment and shock at the fact that these animals can be used in the process of supporting health. This may be due to cultural barriers, stemming from the ingrained perception in Polish society that domestic cattle are raised solely for meat and milk. Not all countries have or have had such barriers. In the Netherlands, where therapy with cows was born, or the United States, it is a popular and valued form of treatment. In different regions of the world, cows also have a variety of uses. For example, in Indian culture, cattle have great religious significance (Guliński, 2017, p. 1).

Other identified barriers are those related to finance. On the one hand, there is the economic hardship of society, which may translate into low demand for therapeutic services. On the other hand, the owners of the facility do not currently have spare funds that they could use to develop and promote their health services or to hire a qualified person to assist them.

Another barrier is the lack of time to develop offerings related to therapy using cows. Mr. and Mrs. Scibut first and foremost have to focus on their cortical business, which is farming. Even if, despite financial constraints, they were able to set aside funds to hire a helper to provide animal therapy, it would still be difficult to find someone trusted with the right qualifications.

Climatic barriers are also important, due to free-range breeding and the lack of a hall to hold classes on rainy days. In addition to precipitation, the temperature on cold days is also a hindrance, which can deter potential visitors.

The identified barriers result in the fact that cow-based therapy provided at the facility will not be a cortical activity in the near future. Nevertheless, they are surmountable in the longer term. As public awareness increases and attitudes change, cultural barriers may become less important in the future or disappear altogether. Financial problems in a dynamically changing market may also lose their importance. As various types of animal therapy become more widespread, the number of specialists who can be hired to help will increase. Seasonality and climatic barriers, on the other hand, could be solved by erecting a hall to hold classes during adverse weather conditions. It is possible that the owners of the facility will decide to make such an investment in the future, but they emphasize that the hall would only be used for therapy for people requiring regular sessions. On the other hand, individual classes for visitors and tourists would continue to be held during the grazing season in the meadow, under soothing natural circumstances.

### **Summary and conclusions**

Despite the still low popularity of therapy with cows in Poland, due to the country's traditions in cattle breeding and milk production, it has great potential to become an important and valued form of animal therapy. Expanding the activities of enterprises to

include cow-assisted therapy services can increase their resilience to crises and translate into an increase in the number of attractive jobs and thus reduce the outflow of the rural population to cities. The described diversification of activities has the potential to positively affect the level of socio-economic development in rural areas, also due to tourism. It should be borne in mind that recipients of rural tourism expect to be able to enjoy a wide range of tourism during their trip (Roman and Stefańczyk, 2017, p. 97). Thus, it is important that new places providing a variety of services, including facilities offering zootherapy, operate and are created in the region.

The case study shows that native breeds, such as the white-backed cattle, work well for use in cow-assisted therapy. The possibility of using indigenous breeds, which are cultural and historical heritage, for health purposes is also expedient in efforts to preserve biodiversity. The unit that was surveyed therefore also has a good chance in the future to develop not only cow-based therapy services, but also those related to the sale of heifers trained for therapy.

The study identified important barriers to the development of cow-assisted therapy services in Poland. These include barriers of time, climate, finances, and those resulting from the lack of suitably qualified personnel on the market. However, the most important obstacles, in the author's opinion, are still the low popularity of this form of therapy in the country, which is closely related to cultural barriers, being the result of the perception of representatives of domestic cattle as animals used exclusively in food production.

Cow-assisted therapy is a form of animal therapy, providing tangible benefits to those who undergo it. Moreover, its introduction can increase the socio-economic level of the region. Therefore, despite the existing barriers, it is worth taking measures to popularize its provision, especially in the context of Poland's high potential due to its resources. For example, training for potential service providers could be conducted by Agricultural Advisory Centres. The site selected for the study is an example of good practices related to the diversification of cattle breeding activities with therapeutic services. It also provides an exemplary centre for providing cow-based therapy, where both service recipients and animal welfare are taken care of.

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