



**ACCESSORY MACHINE FOR MONOPHASE COMPLEX AGRO TECHNOLOGY**

<b>Project title</b>	Factory for production of Accessory machine for monophase complex agro technology - commercial called VT- Multi Tiller
<b>Sector</b>	Innovation sector, agricultural machines
<b>Location</b>	Prijedor Municipality
<b>Project background</b>	<p>VT Multi-Tiller is accessory machine for monophase complex agro technology. VT Multi-Tiller is used in soil preparation and sowing as a replacement for several other accessory machines. In comparison with conventional methods of the soil processing and VT Multi Tiller has important advantages that are reflected in:</p> <ul style="list-style-type: none"> <li>- Preserving and increasing the fertility of the soil, because no violation of it is left after the soil processing at all;</li> <li>- Increasing yields and greater profits up to 30%;</li> <li>- Reduction of production costs and a lower level of funding, fuels, lubricants, spare parts, etc. up to 50%;</li> <li>- Less investment in a number accessory devices - up to 30%;</li> <li>- Effect of increased organizational and decreasing of labor up to 2.5 times;</li> <li>- Savings in time and optimum use of time of sowing;</li> <li>- Easy to handle, because the equipment is operated through electronic management system and controlled from the tractor cab drivers;</li> <li>- High work effects of VT Multi Tiller per unit area and up to three times.</li> </ul> <p>A patent has already been exhibited in world's fairs and won some distinguished innovation awards: Gold medal (Germany, Nürnberg 2007), Silver medals (Russia, Moscow 2007, Switzerland, Geneva 2007, Poland, Warsaw 2007), and Bronze medals (France, Strasbourg 2007, China, Shanghai 2008).</p>
<b>Project status</b>	Business idea
<b>Innovation description</b>	The main goal of this project is preparation of the VT Multi Tiller for the serial production for the world agricultural machinery market, which would solve one of the most important problems of plant production – how to achieve a minimum of pressing in the processing of soil for planting. It consists of several steps:



	<p>manufacturing of the VT Multi Tiller prototypes and zero series, its testing in different geographical climates and regions, evaluation/ verification of results, the application of research results to further development and dissemination and use of project results in world-wide scientific studies, investors communities etc.</p> <p>With the accessory machine for monophasic complex agricultural technology, the goal achieved is a surface and in-depth processing of soil by one-time passage of machinery. It is based on an innovation in the mode of processing, by drilling, inverting, dispersion and crunching, that provides softening and granulation, thus facilitating the seed-soil contact. This principle is an innovation in agro-technology, and gives new and key advantages in the following:</p> <ul style="list-style-type: none"> <li>- The multilayer preparation above and below the placed seed and determination of density degree, including the proper preparation of soil for placing of seeds and its further growth and transformation.</li> <li>- Sowing in which the seed can be individually placed on the precise given depth and in assigned mutual horizontal distance at entire surface, without lines or strips, succeeded by covering with a layer of sponge-structured soil, with the feature of density regulation. This allows for good contact of the seed with the ground, giving the capillary structure, facilitating seed growth and transformation and reducing the loss of moisture.</li> <li>- Homogenous layout of fertilizer per depth, with the possibility to assign a start-up dosage right next to the seed.</li> <li>- Incorporation of means for soil aggregation structuring, protective means, growth bioregulators, achieving a considerably better moisture and oxygen regime in the ground. Aided by this, the genetic potential of plants can give higher crop gain.</li> </ul> <p>All technical possibilities in terms of operation supervision, i.e. operation depth, aggregate granulation, layer density and their flattening, depth of sowing, seed quantity, seed distance and similar operations can be steered by electronic control from the operator's cabin.</p>	
<b>Intellectual property, Patent</b>	National patent application of Bosnia and Herzegovina in 2009 under the official number BAP072579. Since June 2011 in the international framework the patent is known under its commercial name VT Multi Tiller- International application No. PCT/BA2008/000006	
<b>Estimated total investment cost</b>	app. 2 000 000 EUR	
<b>Inputs required from foreign partner</b>	<b>Value</b>	<b>Description</b>
	1 300 000 EUR	Buying factory
	700 000 EUR	Initial costs and the working capital
<b>Form of cooperation with foreign partner</b>	<b>Financial</b>	<b>Technical</b>
	- Investing in patent rights - Joint venture - Sale of licenses	Investing in production in BiH under a contract of cooperation
<b>Supporting information available</b>	For additional information about this project, please contact FIPA either by e-mail: <a href="mailto:fipa@fipa.gov.ba">fipa@fipa.gov.ba</a> or phone number: +387 33 278 080.	