

Italian Agency for Agricultural Mechanization

10th Session of the Technical Committee (TC) of CSAM

&

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STATISTICS FOR ITALY



Total surface = 17.000.000 ha

ITALIAN GDP 2013*



^{*} Source ISTAT - 2013

Total GDP: 1.400 billion €

In Italy there is a ten-yearly census for agricultural sector

	ITALY	EUROPE
Agricultural land used	12.744.196,23 ha (tot. Surface 17.000.000 ha)	172.000.000 ha (tot. 214.000.000 ha)
Arable land	6.938.830,68 ha	104.000.000 ha
Woody plantation	2.323.183,97 ha	10.700.000 ha

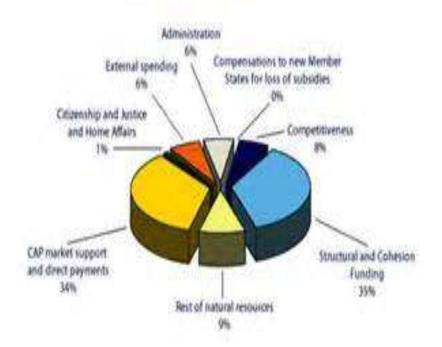
^{*} Source Ministry of Agriculture - 2013

Italy Agricultural production

Cereals	180.267.202 (51,6 % arable land) - UE 54 %
Tuber plants	15.676.844
Vegetables	118.553.251
Fruits	60.954.062
Citrus fruit	60.954.062
Vine	72.828.700
Olive	31.543.432
Grazing	1.112.933 units
Greenhouse vegetables	15.807.919
Tractors	1.600.000 units
Total Value (million €)	54.116

Europe

Make-up of EU budget 2007-2013



Europe (budget 2007 – 2013)

- 45 € billion for the agricultural sector
- 34 % of the overall budget (148 €. billion)

In 2011, for rural development spending to 11% and 30% for direct aid to farmers and market-related expenditure with clear rules according to the "State Aid Regulations" *The new budget will be 2014 – 2020.*



Italian National Agency for Agricultural Mechanisation is an organization created to improve competitiveness, develop technology and assess the performance and safety of machinery, plants and their components and products and plants being used for energy production.



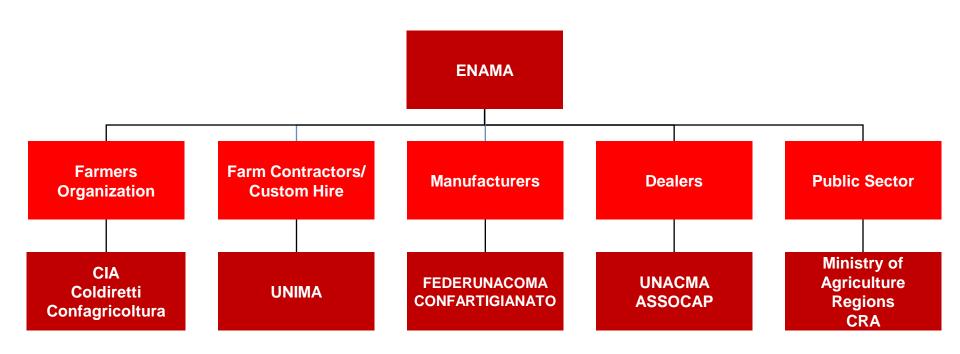


Through its activities, ENAMA disseminate <u>the culture of certification</u>, innovation and appropriate use of agricultural engineering in order to foster a safe, competitive agriculture <u>to benefit the human, the environment and agricultural production</u>.

ENAMA promotes projects, advice and solutions based on a <u>high level of technical and regulatory knowledge</u> for all actors in Italy and worldwide.



Members of ENAMA





ENAMA ACTIVITIES

- Machine Certification
- Product Certification (machine, components, fuels, plants etc.)
 - Homologation
 - Technical Consulting
 - International Activities
 - Studies and researches
 - Training and Information
 - Innovation



ENAMA SYSTEM



NO PROFIT ORGANISATION



Activities with the Italian Ministry of Agriculture and public bodies (including International Organizations)

and

Activities with the private sector



Activities with the Ministry of Agriculture and public bodies (including International Organizations).

Incomes are provided by funding by the Ministry of Agriculture and other public national and international bodies based on a contribution* on expenses to perform projects. Other incomes are provided by Members annual fees.



On early basis these activities perform an important loss in terms of income.



Losses are covered by the net incomes of activities with the private sector.

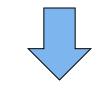


Activities with the private sector

Enama performs activities with the private sector in Italy and worldwide



These activities provide for a net income that is used to cover the losses of the activities with the public sector.







ENAMA ACTIVITIES



ENAMA cannot give its Members any financial benefit but all net incomes must be used to promote agriculture



Product Certification







Product Certification

ENAMA is the <u>independent certification body of third party</u> which benefits of the full representativity of the parts involved in the supply chain.

<u>PRODUCT CERTIFICATION</u>: Certification of products/services, regulated by the sectorial standards or equivalents references, that directly ensures the compliance of the product to specific requirements. Provides for the best guarantee on the continuity of product compliance.

<u>PURPOSE OF PRODUCT CERTIFICATION</u>: To provide confidence to the market about the ability of the producer to obtain and maintain conformity of products. For this reason the conformity mark, may be used for a specific period of time.

ENAMA CERTIFICATION MECHANIZATION:

VS Enama certification of safety of agricultural machines
 Enama Certification of performances and safety of agricultural machines
 Enama certification of components of agricultural machines

AGROENERGY:

ENplus Pellet CertificationAgroforestry solid biofuel

Certification



Machine Certification











Machine Certification

Enama performs volutary and accredited safety tests and functional tests on agricultural machinery and components, released to the Manufacturers constituting a distinctive mark of its products and a considerable added value on the market.

The testing of the functional aspects, <u>based on the current</u> <u>standards/regulation (ISO, EN, etc.)</u>, are carried out by specialized test centers coordinated by ENAMA on machines and components.

ENAMA offers a Certification service for agricultural machines and components:

- VS ENAMA: Safety Certification (accredited by Accredia with certificate no. 088B);
- Certification ENAMA: Performances Certification.

ENAMA performs its Certification activity <u>without any conflict of interest</u> and in the total <u>impartiality and confidentiality</u> in the data management.

ENAMA's Certificates are internationally recognized, e.g. ENTAM (European Network for Testing of Agricultural Machines).



Homologation













Homologation

It's the fundamental requirement for the introduction of a vehicle in the public road traffic and it is divided in: EC; National; OECD / OECD; other.

ENAMA can support manufacturers in the national and EC type approval process.

Besides ENAMA can operate through its network of contacts at international level (OECD / OECD agreements ENTAM and ANTAM) in other countries too.

OECD/OCSE APPROVAL

It's the essential requirement for the export within the Members Countries, and it is aimed to test and verify the functional and safety features and requirements for wheeled agricultural and forestry tractors. Internationally recognized, it is based on OECD/OCSE Tractors Codes.

ENAMA, as OECD Coordination Centre, ensures:

- The same approach and interpretation of the Codes among the Test Stations across the world;
- A fast and accurate technical control of Test reports;
- Traceability and availability of test results.

Technical Consulting







Technical Consulting

ENAMA provides to public administrations, companies and operators, the tools and the knowledge needed to improve their activity, granting expertise and technical experience in the related area of interest.

ENAMA provides answers to questions related to the following areas:

- ✓ Safe use of agricultural machinery
- ✓ Type Approval of agricultural machinery
- ✓ Road Traffic and revision of agricultural machinery
- ✓ Explanation of regulations (ROAD CIRCULATION, ISO, UNI, EN, OCSE/OECD, etc.).

ENAMA published several documents concerning the safe use of agricultural machinery with the aim to provide farmers and operators of agro-mechanical equipment, an efficient training-informative instrument and a valuable contribution for the reduction of accidents related to the use of agricultural machinery.



Agroenergy











ATTIVITÀ DI SVILUPPO, DIFFUSIONE E CERTIFICAZIONE DEI BIOCASIBURANTI, BIOLIQUIDI E BIOLUBRIFICANTI

Agroenergy

Recently ENAMA has started new activities in the sector of Agro and Bioenergy supporting <u>policies for the development of renewable energy in agriculture</u>. The aim is to implement the certification of products and processes involved in the supply chain for the development of agriculture.

The mission of ENAMA is to ensure sustainability, efficiency and traceability of biofuels and of their whole production chain:

- Certification of agro-forestry biomass (<u>ENplus Certification of Pellets</u>)
- > Certification of biofuels, bio-liquids and bio-lubricants
- > Certification and development of biomethane and biogas
- > Technical support to the supply chain actors, to central and local administrations and Italian Ministry of Agriculture
- > Development of pilot projects



Innovation









Innovation

ENAMA <u>runs annual programs for the development of innovation in agricultural mechanization</u> promoted and financed by the Italian Ministry of Agriculture, Food and Forestry.

The programs are designed to actively <u>support research and development</u> <u>in the industry of agricultural machinery manufacturers</u>, contributing at the same time to adjust the supply of agricultural machinery and equipment to the evolving mechanization needs of Italian agriculture. Besides it's aimed to offer <u>improved competitiveness</u> to <u>farmers</u> in an increasingly internationalized market.

A further objective of the program is to <u>improve workers and environment</u> <u>safety in the industry</u>, in order to comply, in the design, use and management of agricultural machinery and equipment with the increasingly stringent regulations in this field.

To date, **14 innovative machines programs** have been completed and 4 are still ongoing, for a total of **153 prototypes**.



Training











Training

Strong point of the ENAMA **20 years old training activity** is the use of senior experts that provide for a better learning of the different operative techniques.

The ENAMA training courses have the purpose to give to professional operators a **better knowledge on the safe use of agricultural machines**.

- SAFE DRIVING TRAINING COURSES FOR AGRICULTURAL OPERATORS: the purpose is to offer to trainers and professional operators a correct driving technique, in order to obtain a higher safety level during the use of the machines in the field and on the road.
- TRAINING IN THE FIELD OF INSPECTION AND REGULATION OF AGRICULTURAL SPRAYERS IN USE: ENAMA operates together with Regional Offices to realise training courses for technicians responsible for the inspections on sprayers and for trainers.
- TRAINING ON THE SAFE USE OF THE AGRICULTURAL MACHINES: The attention is particularly focused on the upgrade of the old used machines in order to reduce the potential risks.



International Activities



ENTAM SUPPORTO ALL'INTERNAZIONALIZZAZIONE

L'ENTAM (Buropean Network for Testing of Agscultural Machines) – istitutio neil 1999 – con il coordinamento di ENAMA, rappresenta la nete del centri prova apartementi ai paesi europei per la svolgimento di attività comuni con lo scopo finale di effettuare e riconoscere le prove di prestazioni, sicurezza e protezione ambientale di macchine ed attrezzature agricole.

Attualmente, FENTAM rappresenta uno strumento internazionale in grado di garantire sistemi di prove amnonizzati ed indipendenti su richiesta del costruttore le prove sono effettuate da contri prove apecializati basardosi su metodologie tecniche comuni al fine di offirire uno strumento per migliorare i mezzi prodotti, in accordo con le regole e gli standard internazionale de unopei 650, EN, DECDS.

L'ENTAM è composto da 11 membri, 1 membro onorario (FAC) e 4 membri osservaturi provenienti da Stati extraeveropei.

Sotto l'egida del Centro delle Nazioni Unite dell'Asia e del Posifico per l'impegneria e la Meccanizzazione Agricola (UNICSAM), l'ENTAM lavorerà a strutto contatto con l'Asian and Pacific Network for l'esting of Agricultural Machinery (ANI/AM) per purmuovine la sostenibilità della meccanizzazione agricola in futta la resione dell'Asia e del Pacifico.

Per maggiori informazioni consultare il sito:



THE ENTAM: A STRONG SUPPORT FOR MANUFACTURERS INTERNATIONALIZATION

The ENTAM (European Network for Testing of Agricultural Machines) - established in 1999 under the coordination of ENAMA - is a public institution nativark on-operating in the field of voluntary and compulsory testing performances, safety, environmental protection of agricultural machinery and environment.

Today Entain represents a unique infernational effort to guarantee independent and harmonised beating systems: every Manufue testing diation carry out the tests required by the manufacture on the basis of PAPTAM technical instructions' in order to obtain an uniform testing according to infernational and European (ISO, PS, DeCC) Standards and international accepted rules.

The ENTAM is made up of eleven EU members, an honorary witness (FAC) and four observer members belonging to coordines outside the European trates.

The ENTAM network aim is to develop outside Europe: under the United Nations Asian and Pacific Certim for Agricultural Engineering and Machinery (INANCAEM) will work on a global network with the Asian and Pacific Network for testing of Agricultural Machinery (ANTAM), promoting ustalinable agricultural mechanization across the Asia Pacific region.

More updates in the Entam website:

entam.net

ANTAM NETWORK

E FUTURO DELLA MECCAMIZZAZIONE AGRICOLA IN ASIA E NEL PACE FCO, ATTRAMEISO UN USO SOSTENBILE DELLE MACCHINE AGRICOLE

ANTAM: Asian and the Pacific Network for Testing of Agitculturul Machinery, promoso nel 2011 a Barglook daff INE ESCAPICSAM, ell primo network della regione astatica four scope è l'avorire un commercio più lesite ed aperto e l'uno sostemble delle macchine agricole e, allo stesso tempo, implementam i requaliti comuni della socarezza per gii operatiori, per l'ambiente e per la produzione di cibo e per lo selluppo di migliori prestazioni.

moltre, FANTAM mira a promuovere una muggiore amontzzazione delle norme, delle procedure di provia e di sistami di carifficazione della meccanizzazione agricola per una migliore qualità dell'agricolitura, su cui saranno bassali riusori meccanismi incentivanti negli Stati membri.

É composto da 14 Stati astatici e da vari latifuti di Bioarra, Associazioni dei costruttori delle marchine agricale e delle organizzazioni polinissionali agricole e lavora in stretta collaborazione con la FAO, UNIOO, OCSE e ENAMA/ENTAM al fine di promuovare una meccanizzazione agricola sosteriabile.

L'intensa cooperazione tra il differenti stakeholder assicura agli agricoltori un facile accesso ai macchinari agricoli con alto livello tecnologico che consenta loro una maggiore sicurozza e produzione più efficiente.

DNTAM rappresenta una partiaforma regionale per I paesi membri che possono mettrere in comuni conoscenze tecnologiche e competenze, condividere le migliori prassi per promovere la migliorii qualità delle macchine agricole.

Durante il Primo Corvegno Annuale, terutori a Pedinei a sottembre 2014 è stata approvata la struttira operatha con specifiche compeleisce e responsabilità che saranno garanzia di impardalità al fine di cossimi molte più sinenzie tra tuttire la parti colmolte. ENAMA, ufficialmente nominata Tachnical Sofessorice Unit dell'ANTAM, fornirà il supporto tecnico econne membra indipendente, predisporta il contenuto tecnico dei nuovi repporti di prova che vernanno eseguiti dal paesi membri.

Il suolo di ENAMA rappresenta un importantir e valido coflegamento tra ANTAM e tutte le organizzacioni internazionali GAQ, UNIDO, OCSE) e con PEN-TAM. Per maggiori informazioni consultare il ute-



THE FUTURE OF AGRICULTURAL MECHANIZATION IN ASIA AND THE PACEN, TOWARDS A SUSTAINABLE USE OF FARM MACHINES.

ANTAM - Astan and the Pacific Naturals for Test-Ing of Agricultural Machinery, launched in 2013 In Bangkok by UN ESCAPICSAM, is the first Network applied in the Asia-Pacific Region and its arm is to faclititle the trade and use of agricultural machines and to implement common requirements of safety of the performance. Besides its aim is to promote harmonic zation of standards testing procedures and certification of agricultural machinery for a better quality of agriculture and subsidy policy in Member countries. This open regional network is composed of 14 countitles across the Asia-Pacific region and various Research institutions, Associations of agricultural machinery manufacturers and farmers organizations and work in collaboration with FAO, UNIDO, OECD and ENAMA/ENTAM to promote a new common development in sustainable agricultural mechanication. that farmers can have on easy access to improved mochinery to increme production and safety. It repmaints a regional platform for member countries to exchange technologies, share knowledge, expertise and best practices to upgrade the existing besting capacity and promote agricultural machinery quality During the Flest Annual Meeting of ANDAM held in Belling on the September of 2014, the organizational structure has been approved with specific divisions and responsibilities, with specific roles that should be the guarantee of impartiality and should create more synangies kurall involved parties.

DNAMA has been officially nominated as Technical Reference Unit of ANTAM and It will provide for technical support and third porty on the technical content of the incoming reports performed by Member Countries.

ENAMAN rule will represent an important and salid international connection between ANTAM and all the international urganizations (FAO, UNIDO, OECD) and the ENDAM network.

For further information, visits

un-csam.org/index.asp















ENAMA is a founder member of <u>ENTAM (European Network for Testing of Agricultural Machines)</u>. It's an international effort to guarantee independent and harmonised testing systems

Regarding the voluntary or compulsory testing in the field of agricultural engineering ENTAM testing stations assess:

- performances
- safety
- environmental protection
- animal welfare requirements in animal husbandry





Organization for Economic Cooperation and Development

OECD TRACTOR CODES

- •<u>Functions</u>: OECD Tractor Codes Certification involves 34 member countries and 32 Testing Stations. OECD exemplify the standardization, testing and certification system
- •Role of ENAMA: is the Coordinating Center of OECD codes and is the National Designated Authority of Italy for OECD Standard Codes for the Official Testing of Agriculture and Forestry Tractors







ANTAM is the first Network applied in the Asia-Pacific Region and its aim is to facilitate the trade and use of agricultural machines and to implement **common requirements of safety of the operator, environment and food production and best performance.**

Besides its aim is to promote *harmonization of standards, testing procedures* and certification of agricultural machinery for a better quality, sustainability of agriculture and subsidy policy in Member countries.

The different stakeholders co-operation ensures that *farmers can have an easy* access to improved machinery to increase production and safety.

ENAMA acts as <u>Technical Reference Unit</u> of ANTAM and it will *provide for technical support and third party on the technical content of the incoming reports* performed by Member Countries.

ENAMA's role will represent an important and valid international connection between ANTAM and all the international organizations (FAO, UNIDO, OECD) and the ENTAM network.

For further informations, visit:

http://www.enama.it/it/index.php
http://www.entam.net/index.php
http://www.oecd.org/agriculture/code/tractors.htm

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