





















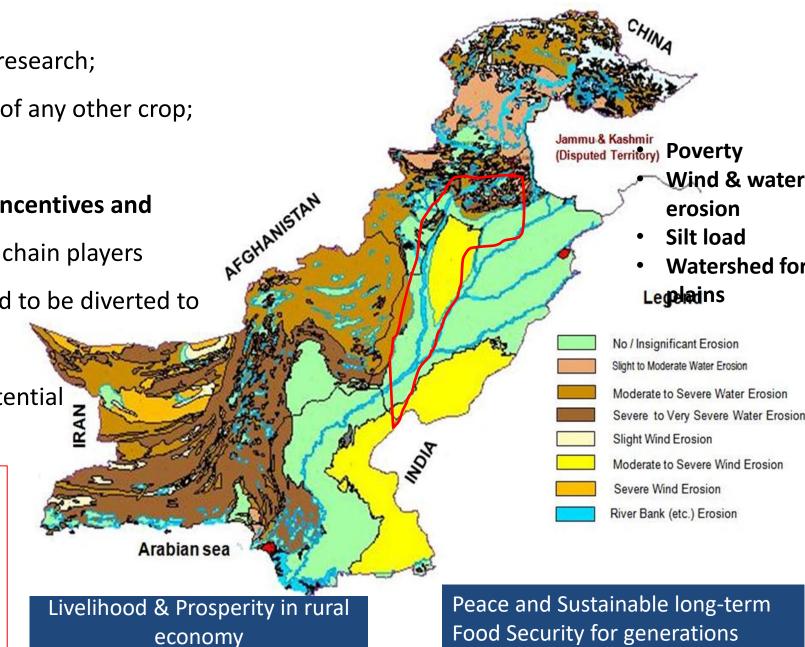
Why to invest in olive sector?

- Thrives best on Marginal Lands;
- suitable areas identified through local research;
- Needs less care; Does not replace area of any other crop;
- Fruit bearing age > 2000 years
- Indigenous R&D Program is providing incentives and solutions olive farmers and other value chain players
- Scarce water resources in pothwar need to be diverted to

high value agriculture

Import bill substitutions and export potential

- Marginal/degraded sub-mountainous lands
- Climate action:
- Poverty alleviation:
- 10 years insurance scheme for family/youth











collaborative R&D activities

It's a team effort







Research Institute * Chakwal Pakiestan

BARI Provided research base to the country









Promising olive varieties suitable commercial cultivation in Pothwar (Provided research base for commercialization)

- Strong R&D Program continues at BARI since 1991
- 86 varieties under evaluation
- Varieties suitable for commercial cultivation in Pothwar region and approved by Punjab Seed Council based on high yield and olive oil quality of international standard

BARI Zaitoon-1 And BARI Zaitoon-2, Pendolino, Koroneiki, Gemlik, Jerboui, Ascolana, Manzanilla, Picual, Hojiblanca, Hamdi

• 64 varieties are not producing fruit on commercial scale, therefore, need to be very cautious about expansion of olive grooves in other regions of Punjab without testing adaptability for different regions

Olive Varieties approved by Punjab Seed Council



Hamdi (Drooping branches, twisting leaves. Ovoid, tunicate base of fruit)



Koroneiki (Short stature, erect branching, small elongated fruit with obvious nipple)



Pendolino (Spreading branches elongated round base fruit without nipple)



Gemlik (Bold fruit slightly concaved with tenuous nipple)



Picual (Base of fruit is truncate with round apex)



Manzanilla (Large and ovoid fruit with (Large fruit having ovoid (Large, ovoid round apex pointed apex and truncate shape, round apex and base)



Hojiblanca truncate base)



Ascolana and truncate base of fruit) week conspicuous



Jerboui (Ovoid fruit with of marbling)

Already approved

BARI Zaitoon - I BARI Zaitoon – II (has similarity with **Coratina**) (has similarity with **Frantoio**)

Approval of varieties has paved way for certification and production of local olive **nursery plants** in private sector

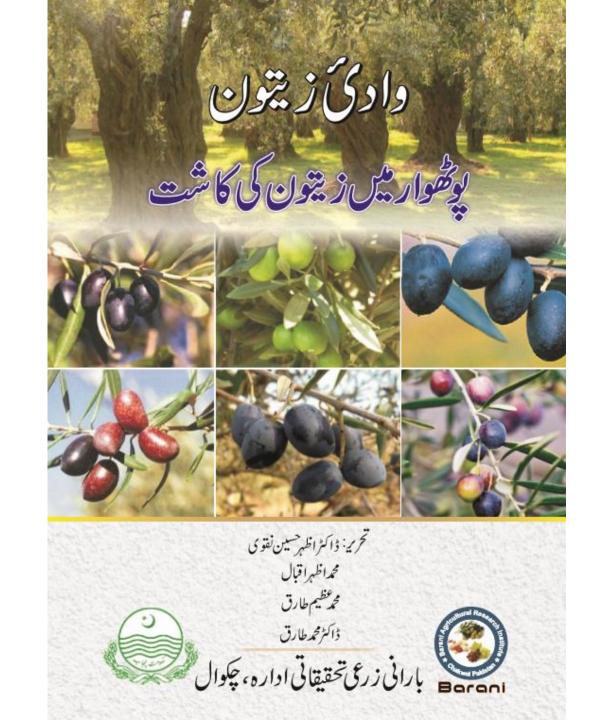
BARI standardized Production Technology to harvest better yields (Best Management Practices)

Olive Orchard Management Guide

http://www.barichakwal.agripunjab.gov.pk/system/files/Book Olive valley.pdf

Jaz Bakhabar Kissan (google app)

Facebook Group
Olive Valley Pakistan

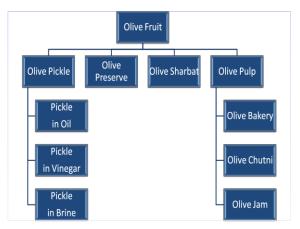


Standardized Value added Products

protocols, practices and recipes of various VA products and is providing technical assistance to various entrepreneurs



Linking to PFA and PSQCA











Project Objectives/themes

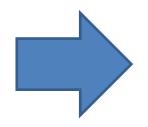
Based on indigenous research by BARI Chakwal and lessons learnt from earlier projects
Agriculture Department, Government of the Punjab launched flagship project
"Developing Pothwar into an olive valley with following objectives:

- 1. Introduce olive plantation in Pothwar and adjoining areas as a strategic intervention to utilizer marginal lands for increasing edible oil production in the country
- 2. Create olive economy based on sustainable production and processing leading to employment generations for rural communities











Project Components/specific objectives

Olive cultivation on 15,100 acres of land with provision of 2,038,500 certified nursery plants

2. Need-based promotional **incentives** like water source development and drip irrigation system to farmers

3. Capacity building of private sector for Provision of technical assistance to olive growers for layout, plantation, orchard and irrigation management

Project incentives for farmers

Project Intervention	Govt. subsidy (%)	
Provision of certified olive nursery plants (high yielding varieties with good adaptability-Indigenous Research)	100	
Water Source Development	70	
Drip Irrigation System installation (through PIPIP)	60	
Technical Assistance to Farmers (Olive orchard establishment and management) Post-hole diggers free of cost on loan for mechanical pit digging	100	
Orchard Layout, Pit Digging/filling cost	Farmers share	
Shifting of nursery Plants and Planting	Farmers share	
Orchard management/operational cost	Farmers share	

Cost sharing basis

Project Intervention	(Rs./acre)				
	Govt. Share	Farmer Contribution	Total	Remarks	
Water Source Development	52,000	22,000	74,000	Cost Sharing 70:30 (Max. subsidy 0.7 m/water source of min. 5 acres)	
Drip Irrigation System (from PIPIP)	75,000	50,000	125,000	Cost Sharing 60 :40	
Provision of Acclimatized Plants	48,700	-	48,700	-	
Technical Assistance to Farmers for orchard establishment & manag.	5,600	-	5,600	-	
Pit Digging/Filling Cost	-	13,500	13,500	Cost = Rs. 100/pit	
Shifting of Plants and Planting	-	2,000	2,000	Cost =Rs. 15/plant	
Orchard operational Cost	-	25,900	25,900	fertilizer, pesticide, irrigation, application, labour etc.	
Total	181,300 (62%)	113,400 (38%)	294,700	-	

Project Area

6 Districts in Pothwar (Attock, Chakwal, Jhelum, Rawalpindi, Khushab & Mianwali

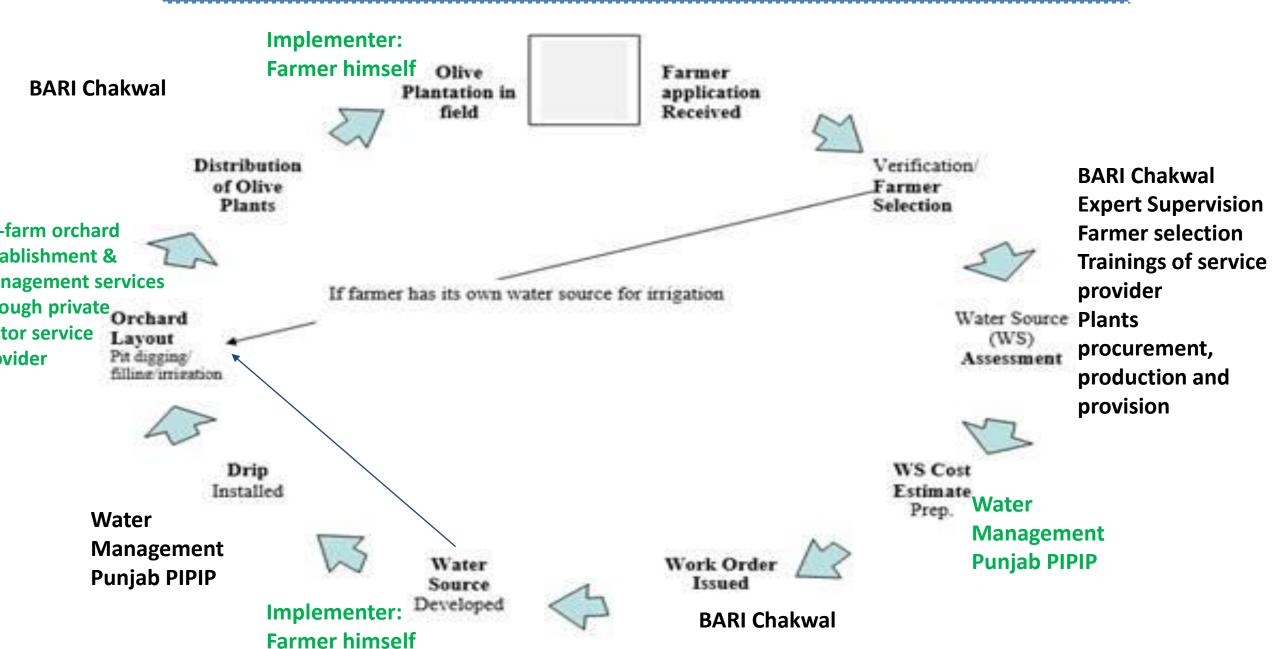
Project Implementation

BARI Chakwal Water Management

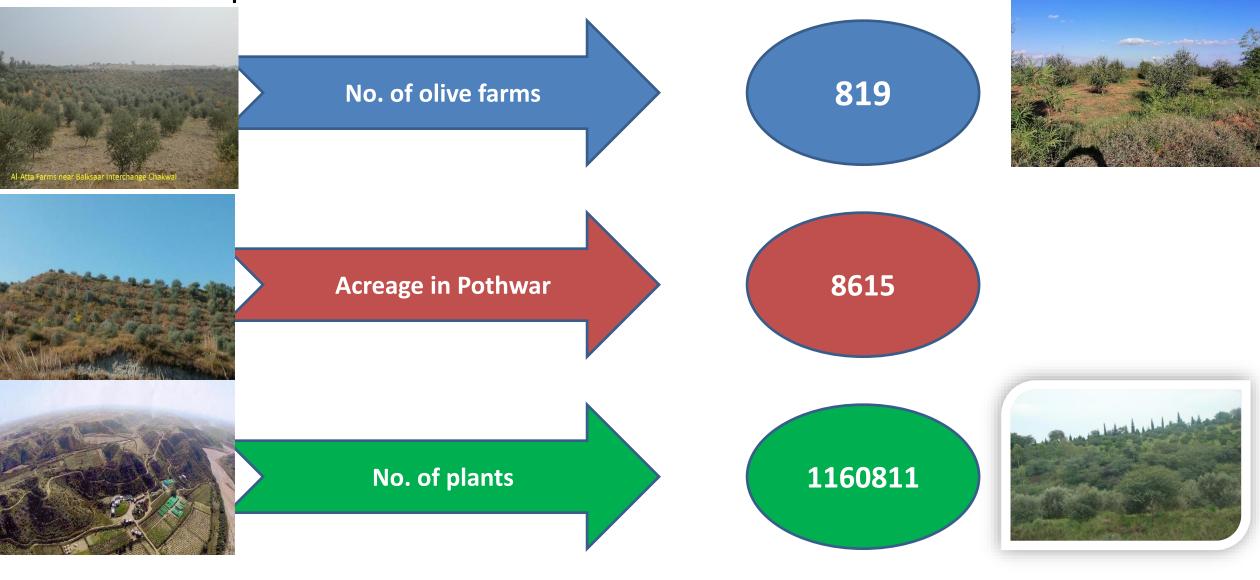
Operation & Maintenance

Beneficiary farmers

Implementation Process



To-date olive plantation status in Pothwar

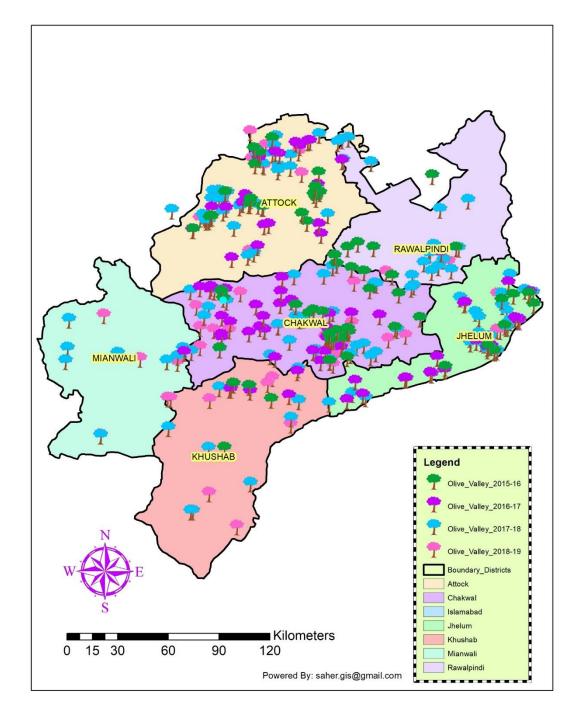


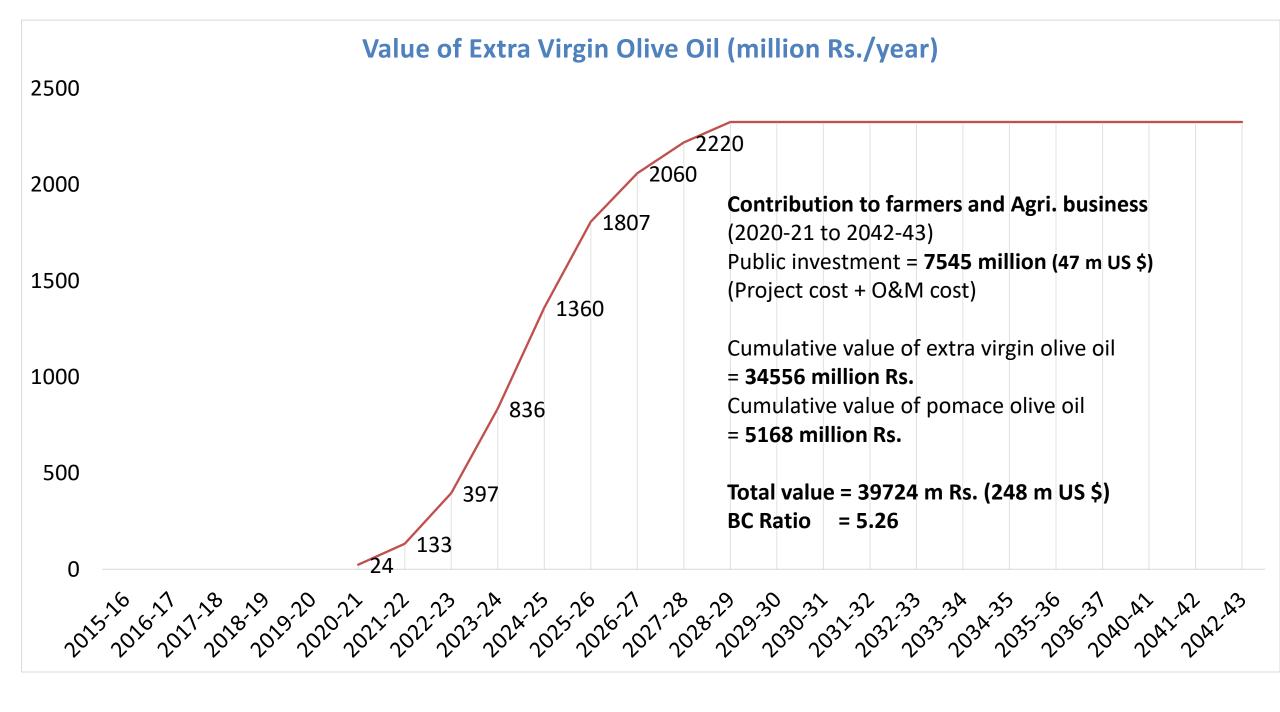
District Wise Olive Plants distributed to applicant farmers (2015-16 to 2019-20)

Name of Project District	No. of beneficiaries	Area under olives (Acres)	Total No of Plants dist.	Distribution % by Districts
Chakwal	294	3285	441744	38
Attock	185	1887	254801	22
Jhelum	149	1754	236555	20
Rawalpindi	122	1026	138256	12
Khushab	45	454	61205	5
Mianwali	24	209	28250	2
Tota	l 819	8615	1160811	

Olive Valley plantation Database in Pothwar







Stakeholders consultation

Punjab Agriculture Department constituted olive Develop Group with USAID PEEP Assistance

- Representation of various stakeholders (30 members working group ODG)
 - Government of the Punjab (04)
 - Academia, Research & Public Sector Dev. Agencies (05)
 - Olive Growers (06)
 - Olive Processor, Service Providers (03)
 - Olive Associations/NGOs/experts (03)
 - Donor/Development partners (02)
 - Banks & Financial institutions (02)
 - USAID PEEP (03)















Stakeholders Resolves and decisions

- ✓ Establishment of Oil Extraction Facility at BARI Chakwal (PARB)
- ✓ Establishment of Center of Excellence in Olive Research & Training CEFORT (Govt. of Punjab)
- ✓ Development and approval of SOPs for Olive nurseries (All)
- ✓ Registration of local nurseries (BARI & FSC&RD)
- ✓ Preparation of audio-video and manuals / guides (BARI-olive valley)
- Adoption and enforcement of Olive Oil Standards??? PS5159 + Table olive standards
- Preparation of Olive Sector Marketing Strategy???
- Developing olive sustainability package for Olive Sector???
 - Developing capacity of scientists and stakeholders, Professional orchard management services,
 Soft Loans, Tax regime, provision of orchard management tools, certifications, brandings, capacity
 buildings programs

Strengthening R&D team on olive culture

The olive centre at BARI chakwal has engaged multi-disciplinary teams of scientists to provide R&D support to olive growers and other stakeholders in Punjab

Multi-disciplinary team composition

Botanist

Food Technologist

• Agronomist

Agri. Economist

- Horticulturist
- Plant Pathologist
- Soil Scientist
- Agri. Engineer



Developing R&D collaborations in olive sectors

Theme:

Address issues of Olive Value Chain Stakeholders **NUST** NILOP **Izhar Farms** University Olive of Sargodha **Foundation Pakistan NAMAL** NRSP & **Progressive CEFORT** Ext. **Farmers BARI Chakwal PODB** The Farms **Nursery PARC National** Unique **Foods Allied Value Pak** Foods

Look forward to develop and strengthen International Collaborations incl:



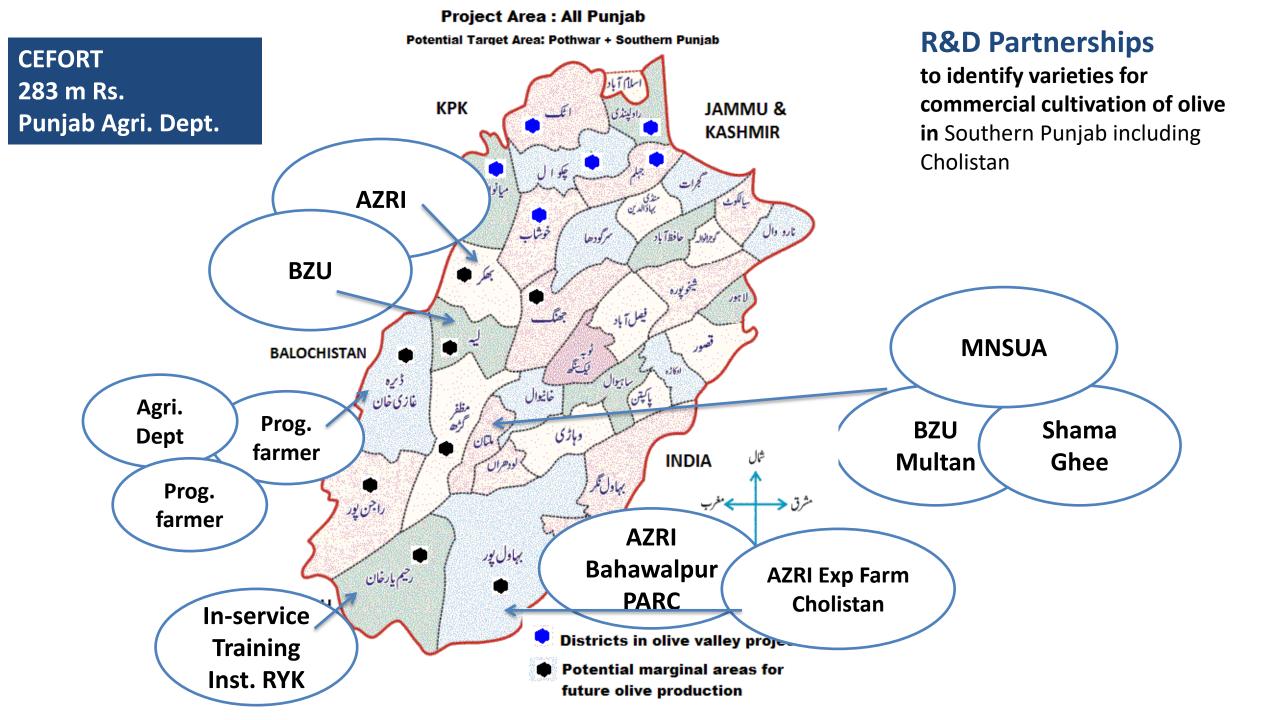






Spanish
Olive Inst.
Cordoba





Olive Nursery Business

(Lets stop import of Olive nursery plants; Local production capacity 5.2 m)

BARI developed protocols & practices

GPU 83 varieties

3 multiplication blocks

Facilitated them for registration with FSC&RD



- Izhar Farms Pvt. Ltd. Talagang Road, Kallar Kahar Contact: 0302 5607725, 0300 5404844 (Capacity: 5 m/annum)
- Al Atta Farm, Bikhari Kalan, Talagang Road, Chakwal. Contact: 0345 5537352, 0334 0001111 (Capacity: 100,000)
- The Farms Nursery, Neela Dhullla, Chakwal. Contact: 0331 1167645, 0345 5151649 (Capacity: 50,000)

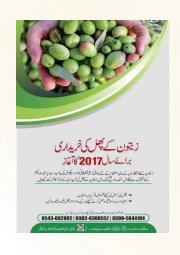
BARI also Providing bud-wood & technical assistance to develop true to type plants in private sector

Olive Marketing Support

BARI and Olive Foundation Pakistan are collaborating to facilitate farmers and processors in marketing of olive fruit and other products

Purchase rate of Olive fruit

- Large olive fruit at lemon green stage @ Rs. 130/- per kg.
- Small Olive fruit at fully ripened stage (black) @ Rs. 100/- per kg.





BARI Providing cold press olive extraction service





Processing capacity

600 kg/hour

- During last three, BARI provided oil extraction facility free of cost to olive farmers and 140 ton olive fruit was processed.
- Rs. 100/litre oil fee to be charged from current season
- > Oil % range: 1.0-28.5% (Av.11%)
- Quality: International standard Extra Virgin
- > Oil content improving with farmers education



Processing capacity

100 kg/hour

کھل سے تیل کی بروقت کشیدا ور بہتر معیار حاصل کرنے کے لیے مندرجہ ذیل ہدایات پڑمل کریں۔

- 🖈 سنررنگ کا کیا کھل ا چار بنانے کے کام آتا ہے لہذا یہ کھل تیل کی کشید کے لیے موزوں نہیں ہے۔
- 🖈 جب پھل کا 75 فیمد (دوتہائی) یااس سے زیادہ حصہ سبزے جامنی رنگت اختیار کرلے تواسے تیل نکلوانے کے لیے تو ژا جا سکتا ہے۔
 - 🖈 تیل نکلوانے کے لیے پھل 15 اکتوبر سے پہلے ہرگز نہ تو ڑا جائے اس سے تیل کی مقدار بہت کم حاصل ہوتی ہے۔
 - 🖈 کھل کو ہر داشت کے دوران زخی ہونے سے بچایا جائے۔
 - 🖈 کھل کوتو ڑنے کے بعد زیادہ دیرتک رکھنا مناسب نہیں اور اسے تو ڑنے کے بعد سابید دارجگہ پر رکھیں۔
- 🖈 کھل تو ڑنے اورا کٹھا کرنے کے بعداس بات کا خیال رکھا جائے کہاس میں ککڑی ،شیشہ، پقراور دھات کے ککڑے شامل نہ ہونے پائیں تا کہ تیل کشید کرنے والی مشین کونقصان نہ ہو۔
- 🖈 کھل کوتو ڑنے کے بعد جالی وہوا دارٹو کر بوں میں رکھ کرا دارے تک لائیں اور کسی جمی قتم کی بوری پاتھیلوں میں بند کرنے سے گریز کریں۔
 - 🖈 زیتون کی مختلف اقسام کا کھل علیحد ہ علیحد ہ رکھا جائے۔
 - 🖈 زخمی یا خراب کپل کوا چھے وصحت مند کپل سے علیحدہ کرلیا جائے تا کہ تیل کا اعلیٰ معیار برقرار رہے۔
 - 🖈 کھل کوتو ڑنے کے بعدا سے 12سے 24 گھنٹوں کے اندرمشین تک پہنچادیں تا کہ بہتر معیار کا تیل کشید کیاجا سکے۔
 - 🖈 تیل کے لیے شکھنے کی بوتل یا جاروغیرہ بھی ساتھ لا ئیں اور اگر پھل بہت زیادہ ہوتو مناسب جسامت کے فوڈ گریڈیشین لیس سٹیل والے برتن بھی ساتھ لائیں ۔
 - 🖈 باغبان حضرات کے زیون کے تیل میں سے 50 ملی لیٹرتیل کانمونہ حاصل کیا جائے گا جوزیتون کے تیل کے معیار کو جانچنے کے لیے

نوٹ ۔ باغبان حضرات کوسال 2020ء میں بارانی زرعی مخقیقاتی ادارہ چکوال سے زیون کے تیل کی کشید کی فیس بلحاظ 100 رویے فی لیٹر تیل ا دا کرنا ہوگی۔



بارانی زرعی تحقیقاتی اداره (باری) چکوال

فون: 0543-662004, 0543-662004

Based on last three years extraction service, BARI has developed **SOPs** for farmers for follow to avail quality olive oil extraction service

It is introducing bins for fruit transport & **Food Grade** Steel containers for safe storage



ارانی زرعی تحقیقاتی اداره ، چکوال کی از کاری کی از کاری کی از رعی تحقیقاتی اداره ، چکوال



زیتون کے پھل سے تیل نکلوانے کی سہولت برائے سال 2020ء

بارانی زرعی تحقیقاتی ادارہ چکوال با غبان حضرات کو زیتون کے پھل سے تیل نکلوانے کی سہولت فراہم کر رہا ہے۔ اس سہولت سے مستفید ہونے کے لیے کھل توڑنے سے قبل ا بنی باری کاتعین کرنے کے لئے مندرجہ ذیل ٹیلی فون نمبر پر پیشکی اطلاع دیں اورصرف بتائے گئے دن اور وقت پر ہی تشریف لا ئیں تا کہ آپ کوا نتظار کی زحمت نہ کرنی پڑے۔ یہ سہولت کھل کے موسم اکتو برتا دسمبر 2020ء کے لیے ہے۔



انعام الحق

0543-662001 0331-5243923



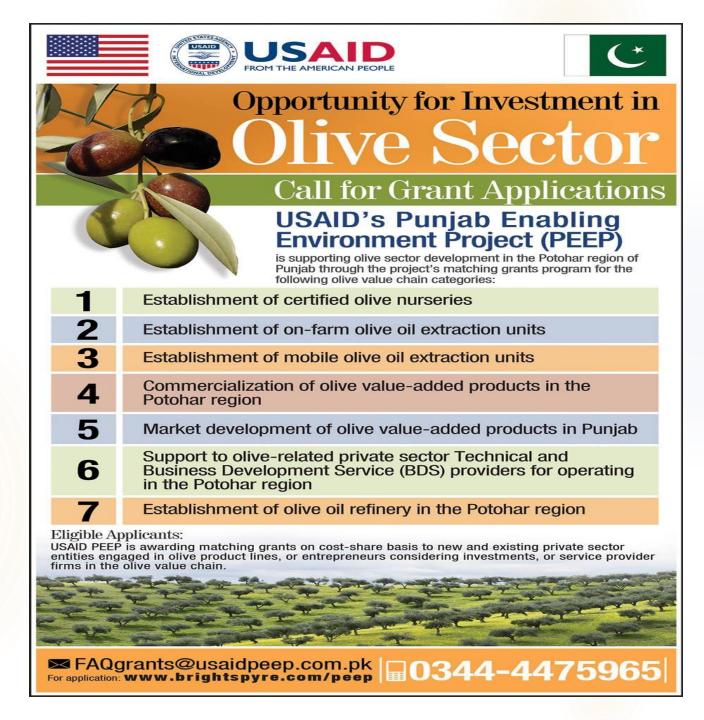
پھل کا بیمرحلہ تیل کی کشید کے لیے مناسب ہے



کھل کا بیمرحلہ احیار بنانے کے لیے موزوں ہے

ويب ما تث: www.barichakwal.agripunjab.gov.pk

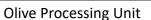
USAID provided 06 matching grants to private sector



Installation of Olive Fruit Processing Unit in Private sector

Unique Value Pakistan Village Chohan, Tehsil & District Chakwal







Olive Leaf Grinder



Olive Dryer



Olive D-stoner

Technical Assistance and joint R&D CEFORT BARI Chakwal



Olive Slicer





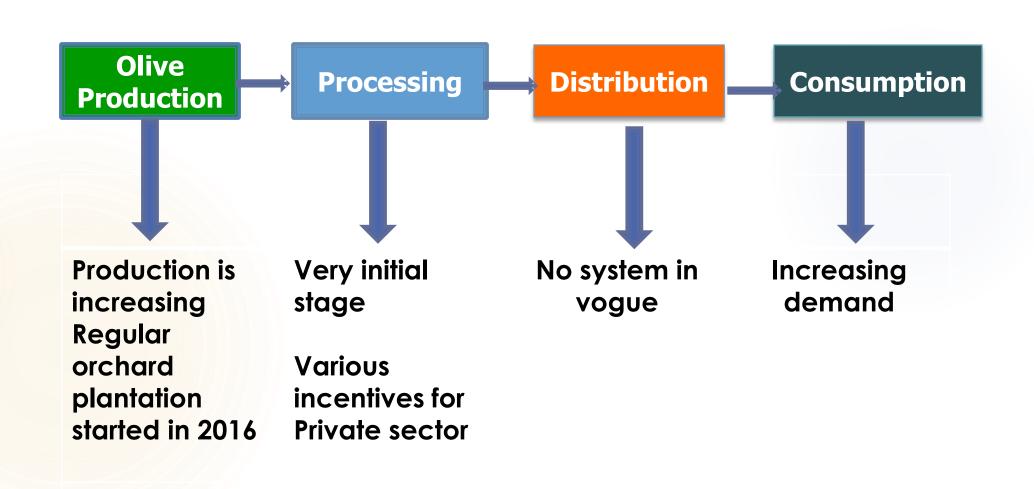
Olive Fruit Grader

Shrink Wrap Sealer

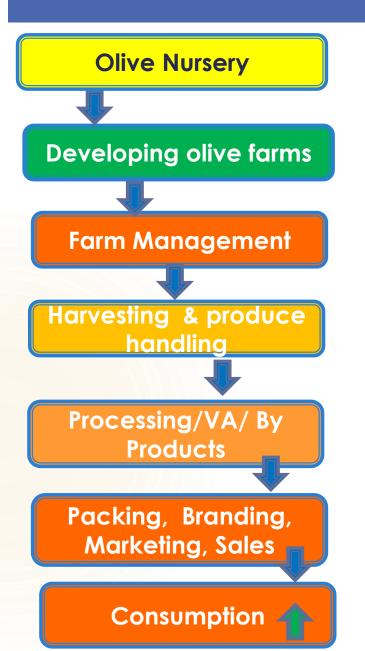


Oil Storage Tank

Olive Sector & Value Chain Status in Pothwar (Opportunities for investment)



Olive Value Chain (status & way forward)



Izhar Farms, Al-Atta, The Farms Nursery, BARI **Expedite certification process, public procurement**

Good Pace: Olive valley, PSDP

Private sector engaged on pilot scale

Professional services, trainings and tools?

Production: 101 ton (2019); multiplying

Farmer need continuous education & support

not to harvest pre-mature/at early stages

09 cold press units installed; small scale entrepreneurship
More processing infrastructure
Trainings in product hygiene and legislative requirements
Adoption & Enforcement of olive oil standards by PFA, PSQCA

Olive Sector overview in Pothwar

Theme: **Establish olive industry in Pakistan**

> 04 Private Sector **Nurseries registered** with FSC&RD producing Olive nursery plants

> > BARI Providing coldpress Oil Extraction **Services**

> > > Pickles, Tea, Bakery products, olive oil etc

Olive Cultivation in Progress



Providing R&D Support to farmers and other olive Stakeholders

Converting olive Project into a Program

> Unique Value Pvt. installed olive **Processing unit** and providing services in 2020



Olive **Production** has Started (farmers brought 101 ton at BARI)

Olive Foundation Pakistan is organizing farmers & Purchasing Fruit in private sector

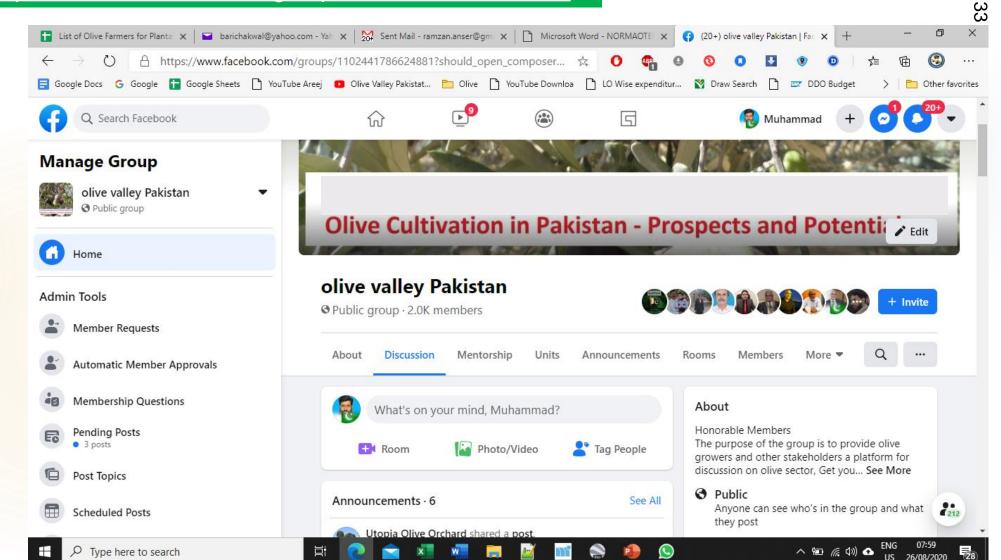






FB Group: Olive Valley Pakistan Lets join us to develop olive sector in Pakistan

https://www.facebook.com/groups/1102441786624881/



Thanks *Together we can accomplish*





Goal & Objectives of CEFORT

Strengthening indigenous R&D Program on olives

- Develop capabilities & capacities in Punjab for olive cultivation, management, post-harvest, processing and value addition/product development
- Develop & adapt technologies for development of olive sector in Punjab through on-station and farmer participatory research
- Act as a repository of olive genetic resources and their management.
- Undertake socio-economic research in olive crop

Next logical continuation of the on-going Olive Valley project Converting Olive project into an R&D Program