FAO – WORKSHOP IN TRONDNEIM / 08
SCANTLINGS FOR WOODEN FISHING VESSELS

History and development of fishing boat construction

In Central America.

Gerd Christoph – El Salvador – Central America

BOATBUILDING HISTORY & TRADITION:
Dugout Canoe – flat bottom planked boat

Flat bottom planked boats for calmed seas:
An approach with LIMITED RESOURCES

SEVERE NATURAL CONDITIONS:
Dangerous ocean entrances for small and
wooden boats without engines

Lifting hoists work well from piers, thus providing
Improved, but limited ACCESS TO THE SEA

1 KEY ASPECTS

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Flat bottom planked boats worked well into the seventies before being replaced by fiberglass

QUALITY IMPROVEMENT of wooden boat construction

SIZE INCREASE: Shrimp travelers up to lengths of 60'.

The traditional dugout canoe still has widespread acceptance.

2 DEVELOPMENTS IN WOOD

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Fiberglass boats developed for the same use as their wooden predecessors.

Typical design for a 21' fiberglass fishing boat, with installed icebox and other appliances.

Clearly a design for larger outboard engines.
Sails ? Oars ?

Fiberglass boats in all shapes and sizes.

3 THE EMERGENCE OF FIBERGLASS

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-Appropriate design.

-Positive model construction.

-Mould casting.

-Production

-Testing.

-Durability

-Easy maintenance and repair.

-Beach landing.

-Sustainability ?

(Wood resources)

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Medium size fishing travelers build in
Ferro cement. Deck and inboard engines.

Deck, cabin, hydraulic winches, iced fish hold.
Safety, range and autonomy.

Cheap material costs. Qualified labor.
Low maintenance. Durability ?

Acceptable production

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PRESENT SITUATION:

- Actual, wide-spread solution based on fiberglass vessels powered by outboard engines

- High impact of fossil fuel prices on both material and fuel costs

- Emerging timber management in Central America makes wood a feasible boatbuilding material option

- Alternative propulsion techniques (wind, row) not in practice

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THE CHALLENGE:

- Appropriate design, taking into account local conditions

- Cultural acceptance

- Sustainable approach for boatbuilding materials and propulsion

A possible option:

Wooden, wind-driven fishing vessels?

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